The Texas Natural Resource Conservation Commission (TNRCC or commission) adopts amendments to §§115.161, 115.162, 115.164 - 115.167, and 115.169, concerning Batch Processes; §§115.122, 115.125 - 115.127, and 115.129, concerning Vent Gas Control; and §115.449, concerning Offset Lithographic Printing. The commission adopts these revisions to Chapter 115, concerning Control of Air Pollution from Volatile Organic Compounds, and to the state implementation plan (SIP) in order to conform with the United States Environmental Protection Agency's (EPA) reasonably available control technology (RACT) requirements in the Houston/Galveston (HGA) ozone nonattainment area and to obtain volatile organic compound (VOC) emission reductions which will result in reductions in ozone formation in HGA. In an effort to improve implementation of the existing Chapter 115, the commission also adopts amendments to §115.10, concerning Definitions; and §§115.211, 115.212, and 115.216, concerning Loading and Unloading of Volatile Organic Compounds; new §115.120, concerning Vent Gas Definitions; §115.240, concerning Stage II Vapor Recovery Definitions; and §115.430, concerning Flexographic and Rotogravure Printing Definitions; and corresponding revisions to the SIP. Sections 115.10, 115.122, 115.125, 115.126, 115.129, 115.162, and 115.212 are adopted *with changes* to the proposed text as published in the August 25, 2000, issue of the *Texas Register* (25 TexReg 8253). Sections 115.120, 115.127, 115.161, 115.164 - 115.167, 115.169, 115.211, 115.216, 115.240, 115.430, and 115.449 are adopted *without changes* and will not be republished.

BACKGROUND AND SUMMARY OF THE FACTUAL BASIS FOR THE ADOPTED RULES

The HGA ozone nonattainment area is classified as Severe-17 under the Federal Clean Air Act (FCAA), 1990 Amendments, (42 United States Code (USC), §§7401 et seq.), and therefore is required to attain the one-hour ozone standard of 0.12 parts per million (ppm) by November 15, 2007. In

addition, 42 USC, §7502(a)(2), requires attainment as expeditiously as practicable, and 42 USC, §7511a(d), requires states to submit ozone attainment demonstration SIPs for severe ozone nonattainment areas such as HGA. The HGA area, defined by Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties, has been working to develop a demonstration of attainment in accordance with 42 USC, §7410. On January 4, 1995, the state submitted the first of its Post-1996 SIP revisions for HGA.

The January 1995 SIP consisted of urban airshed model (UAM) modeling for 1988 and 1990 base case episodes, adopted rules to achieve a 9% rate-of-progress (ROP) reduction in VOC, and a commitment schedule for the remaining ROP and attainment demonstration elements. At the same time, but in a separate action, the State of Texas filed for the temporary nitrogen oxides (NO_x) waiver allowed by 42 USC, §7511a(f). The January 1995 SIP and the NO_x waiver were based on early base case episodes which marginally exhibited model performance in accordance with EPA modeling performance standards, but which had a limited data set as inputs to the model. In 1993 and 1994, the commission was engaged in an intensive data-gathering exercise known as the Coastal Oxidant Assessment for Southeast Texas (COAST) study. The commission believed that the enhanced emissions inventory, expanded ambient air quality and meteorological monitoring, and other elements would provide a more robust data set for modeling and other analysis, which would lead to modeling results that the commission could use to better understand the nature of the ozone air quality problem in the HGA area.

Around the same time as the 1995 submittal, EPA policy regarding SIP elements and timelines went through changes. Two national programs in particular resulted in changing deadlines and requirements.

The first of these programs was the Ozone Transport Assessment Group (OTAG). This group grew out of a March 2, 1995 memo from Mary Nichols, former EPA Assistant Administrator for Air and Radiation, that allowed states to postpone completion of their attainment demonstrations until an assessment of the role of transported ozone and precursors had been completed for the eastern half of the nation, including the eastern portion of Texas. Texas participated in this study, and it has been concluded that Texas does not significantly contribute to ozone exceedances in the Northeastern United States. The other major national initiative that has impacted the SIP planning process is the revision to the national ozone standard. The EPA promulgated a final rule on July 18, 1997 changing the ozone standard to an eight-hour standard of 0.08 ppm. In November 1996, concurrent with the proposal of the standards, the EPA proposed an interim implementation plan (IIP) that it believed would help areas like HGA transition from the old to the new standard. In an attempt to avoid a significant delay in planning activities, Texas began to follow this guidance, and readjusted its modeling and SIP development timelines accordingly. When the new standard was published, the EPA decided not to publish the IIP, and instead stated that, for areas currently exceeding the one-hour ozone standard, that standard would continue to apply until it is attained. The FCAA requires that HGA attain the one-hour standard by November 15, 2007.

The EPA issued revised draft guidance for areas such as HGA that do not attain the one-hour ozone standard. The commission adopted on May 6, 1998 and submitted to the EPA on May 19, 1998 a revision to the HGA SIP which contained the following elements in response to EPA's guidance: UAM modeling based on emissions projected from a 1993 baseline out to the 2007 attainment date; an estimate of the level of VOC and NO_x reductions necessary to achieve the one-hour ozone standard by

2007; a list of control strategies that the state could implement to attain the one-hour ozone standard; a schedule for completing the other required elements of the attainment demonstration; a revision to the Post-1996 9% ROP SIP that remedied a deficiency that the EPA believed made the previous version of that SIP unapprovable; and evidence that all measures and regulations required by Subpart 2 of Title I of the FCAA to control ozone and its precursors have been adopted and implemented, or are on an expeditious schedule to be adopted and implemented.

In November 1998, the SIP revision submitted to the EPA in May 1998 became complete by operation of law. However, the EPA stated that it could not approve the SIP until specific control strategies were modeled in the attainment demonstration. The EPA specified a submittal date of November 15, 1999 for this modeling. In a letter to the EPA dated January 5, 1999, the state committed to model two strategies showing attainment.

As the HGA modeling protocol evolved, the commission eventually selected and modeled seven basic modeling scenarios. As part of this process, a group of HGA stakeholders worked closely with commission staff to identify local control strategies for the modeling. Some of the scenarios for which the stakeholders requested evaluation included options such as California-type fuel and vehicle programs as well as an acceleration simulation mode equivalent motor vehicle inspection and maintenance program. Other scenarios incorporated the estimated reductions in emissions that were expected to be achieved throughout the modeling domain as a result of the implementation of several voluntary and mandatory state-wide programs adopted or planned independently of the SIP. It should be made clear that the commission did not propose that any of these strategies be included in the

ultimate control strategy submitted to the EPA in 2000. The need for and effectiveness of any controls which may be implemented outside the HGA eight-county area will be evaluated on a county-by-county basis.

The SIP revision was adopted by the commission on October 27, 1999, submitted to the EPA by November 15, 1999, and contained the following elements: photochemical modeling of potential specific control strategies for attainment of the one-hour ozone standard in the HGA area by the attainment date of November 15, 2007; an analysis of seven specific modeling scenarios reflecting various combinations of federal, state, and local controls in HGA (additional scenarios H1 and H2 build upon Scenario VIf); identification of the level of reductions of VOC and NO_x necessary to attain the one-hour ozone standard by 2007; a 2007 mobile source budget for transportation conformity; identification of specific source categories which, if controlled, could result in sufficient VOC and/or NO_x reductions to attain the standard; a schedule committing to submit by April 2000 an enforceable commitment to conduct a mid-course review; and a schedule committing to submit modeling and adopted rules in support of the attainment demonstration by December 2000.

The April 19, 2000 SIP revision for HGA contained the following enforceable commitments by the state: to quantify the shortfall of NO_x reductions needed for attainment; to list and quantify potential control measures to meet the shortfall of NO_x reductions needed for attainment; to adopt the majority of the necessary rules for the HGA attainment demonstration by December 31, 2000, and to adopt the rest of the shortfall rules as expeditiously as practical, but no later than July 31, 2001; to submit a Post-99 ROP plan by December 31, 2000; to perform a mid-course review by May 1, 2004; and to perform

modeling of mobile source emissions using the EPA mobile source emissions model (MOBILE6), to revise the on-road mobile source budget as needed, and to submit the revised budget within 24 months of the model's release. In addition, if a conformity analysis is to be performed between 12 months and 24 months after the MOBILE6 release, the state will revise the motor vehicle emissions budget (MVEB) so that the conformity analysis and the SIP MVEB are calculated on the same basis.

The emission reduction requirements included as part of this SIP revision represent substantial, intensive efforts on the part of stakeholder coalitions in the HGA area. These coalitions, involving local governmental entities, elected officials, environmental groups, industry, consultants, and the public, as well as the commission and the EPA, have worked diligently to identify and quantify potential control strategy measures for the HGA attainment demonstration. Local officials from the HGA area have formally submitted a resolution to the commission, requesting the inclusion of many specific emission reduction strategies.

Reductions associated with the ozone control strategies that will be implemented outside the HGA nonattainment area will benefit the HGA nonattainment area. This is due to the regional nature of air pollution, the contribution from mobile sources, and the economies of scale and associated market advantages related to distribution networks for some strategies. At the time the 1990 FCAA Amendments were enacted, the focus on controlling ozone pollution was centered on local controls. However, for many years an ever increasing number of air quality professionals have concluded that ozone is a regional problem requiring regional strategies in addition to local control programs. As nonattainment areas across the United States prepared attainment demonstration SIPs in response to the

1990 FCAA Amendments, several areas found that modeling attainment was made much more difficult, if not impossible, due to high ozone and ozone precursor levels entering from the boundaries of their respective modeling domains, commonly called transport. Recent science indicates that regional approaches may provide improved control of ozone air pollution.

The current SIP revision contains rules, enforceable commitments, photochemical modeling analyses, and calculation of the remaining NO_x reductions required to reach attainment (gap calculation) in support of the HGA ozone attainment demonstration. In addition, this SIP contains Post-1999 ROP plans for the milestone years 2002 and 2005, and for the attainment year 2007. The SIP also contains enforceable commitments to implement further measures, if needed, in support of the HGA attainment demonstration, as well as a commitment to perform and submit a mid-course review. Additional elements of the control strategy for the HGA SIP are being adopted concurrently in this issue of the *Texas Register*, or were included in the HGA SIP considered by the commission on December 6, 2000 and planned to be submitted to the EPA by December 31, 2000.

In order for the state to have an approvable attainment demonstration, EPA has indicated that the state must adopt those strategies modeled in the November 15, 1999 submittal and then adopt sufficient controls to close the remaining gap in NO_x emissions. The Houston nonattainment area will need to ultimately reduce NO_x more than 750 tons per day (tpd) to reach attainment with the one-hour standard. In addition, a VOC reduction of about 25% will have to be achieved. Adoption of VOC RACT rules will contribute to attainment and maintenance of the one-hour ozone standard in the HGA area.

Under 42 USC, §7511b of the 1990 Amendments to the FCAA, the EPA is required to issue Control Techniques Guideline (CTG) guidance documents for the purpose of assisting states in developing RACT controls for sources of VOC emissions. In turn, each state is required to submit a revision to its SIP which implements RACT regulations for VOC sources in moderate or above ozone nonattainment areas. Specifically, FCAA, 42 USC, §7511a(b)(2)(A), requires states to submit RACT regulations for VOC sources that are covered by a CTG issued after November 15, 1990 (the enactment date of the 1990 FCAA), but prior to the time of attainment. Similarly, FCAA, 42 USC, §7511a(b)(2)(C), requires that RACT be applied to major VOC sources located in moderate or above ozone nonattainment areas which are not the subject of a CTG; such sources are known as "non-CTG" sources. Limits in state rules must be at least as stringent as the CTG limits or otherwise must be determined to meet RACT.

Each CTG contains a “presumptive norm” for RACT for a specific source category, based on the EPA's evaluation of the capabilities and problems general to that category. Where applicable, the EPA recommends that states adopt requirements consistent with the presumptive norm. However, the presumptive norm is only a recommendation. States may choose to develop their own RACT requirements on a case-by-case basis, considering the emission reductions needed to obtain achievement of the national ambient air quality standards (NAAQS) and the economic and technical circumstances of the individual source.

Source categories for which the EPA was to issue CTGs under FCAA, 42 USC, §7511a(b)(2)(A), include batch processes and offset lithographic printing. Instead of issuing CTGs for these source

categories, the EPA issued guidance documents known as Alternative Control Techniques (ACT) documents. An ACT does not establish the presumptive norm for RACT but merely contains information on emissions, controls, control options, and costs. The EPA itself has consistently noted in the ACT documents that each ACT "…presents options only, and does not contain a recommendation on RACT." Although the EPA has not issued the required CTGs for batch processes and offset lithographic printing, 42 USC, §7511a(b)(2)(C) of the 1990 FCAA Amendments still requires states to ensure that RACT is in place for all major VOC sources in moderate and above ozone nonattainment areas.

Historically, the commission's position has been that the existing general vent gas rule in Chapter 115, Subchapter B: Division 2 is adequate to ensure RACT for batch processes; however, this is difficult to demonstrate because the necessary information for such a demonstration is not in the emissions inventory (EI). Staff attempted to develop a demonstration of equivalency between the existing general vent gas rule and the batch processes ACT using the EPA's 5% rule. The EPA's "5% rule" provides a mechanism for states to justify exemptions or cutpoints which are more lenient than the EPA's RACT baseline. It is applied by determining the total emissions allowed by the EPA's RACT baseline (including exemptions) and comparing this to the emissions allowed (including exemptions) by a state regulation. If the difference is less than 5.0%, the EPA considers that there is no substantive difference between the EPA and state requirements. The staff was unable to assemble the information necessary to demonstrate to the EPA's satisfaction that existing rules represent RACT for batch processes in HGA because some of the necessary information is known only by the affected industry sources. Consequently, it is necessary to adopt and implement Chapter 115 rules for batch processes in HGA.

Bakeries are a non-CTG source category. The EPA published an ACT guidance document detailing appropriate control technology for bakeries. Based on this document, as well as on input from the bakery industry, the commission developed the applicable portion of the Chapter 115 vent gas rule pertaining to bakeries.

The EPA has stated that the existing vent gas rule is deficient in implementing RACT for bakeries and therefore is unapprovable. The EPA has made it clear that failure to correct the deficiencies will result in undesirable consequences for the affected ozone nonattainment areas, as specified in the FCAA. The commission adopted revisions on February 24, 1999 which address deficiencies in the bakery rule as it applies in the Dallas/Fort Worth (DFW) ozone nonattainment area. (See the March 12, 1999 issue of the *Texas Register* (24 TexReg 1777)). However, deficiencies in the bakery rule as it applies in HGA must be corrected for the HGA Attainment Demonstration SIP to be approvable. Specifically, the EPA has specified that RACT for bakery ovens is 80 - 90% control efficiency, while the commission rule as negotiated in 1994 requires only a 30% emission reduction.

The Chapter 115 offset lithographic printing rule (§§115.440, 115.442, 115.443, 115.445, 115.446, and 115.449) is currently a contingency rule for HGA. Because HGA is a severe ozone nonattainment area, a source in HGA is major if it has the potential to emit 25 tons per year (tpy) or more of VOC emissions. FCAA, 42 USC, §7511a(b)(2), requires that RACT be applied to major sources, and consequently it is necessary to implement this rule in HGA for sources with VOC emissions equal to or greater than 25 tpy. The rule will remain a contingency rule for offset lithographic printers in HGA

with VOC emissions below 25 tpy. The offset lithographic printers in HGA with VOC emissions below 25 tpy must still comply with the general vent gas rules in Chapter 115.

SECTION BY SECTION DISCUSSION

The amendments to §115.10, concerning Definitions, delete the definitions of bakery oven, synthetic organic chemical manufacturing industry batch distillation operation, synthetic organic chemical manufacturing industry batch process, synthetic organic chemical manufacturing industry distillation operation, synthetic organic chemical manufacturing industry distillation unit, and synthetic organic chemical manufacturing industry reactor process. These terms are used solely within the Chapter 115 vent gas rules (§§115.121 - 115.123, 115.125 - 115.127, and 115.129) and are being concurrently relocated to a new §115.120, concerning Vent Gas Definitions.

The amendments to §115.10 also delete the definitions of independent small business marketer of gasoline, and owner or operator of a motor vehicle fuel dispensing facility. These terms are used solely within the Chapter 115 Stage II vapor recovery rules (§§115.241 - 115.249) and are being concurrently relocated to a new §115.240, concerning Stage II Vapor Recovery Definitions.

In addition, the amendments to §115.10 delete the definitions of flexographic printing process, packaging rotogravure printing, publication rotogravure printing, and rotogravure printing. These terms are used solely within the Chapter 115 flexographic and rotogravure printing rules (§§115.432, 115.433, 115.435 - 115.437, and 115.439) and are being concurrently relocated to a new §115.430, concerning Flexographic and Rotogravure Printing Definitions.

The amendments to §115.10 also delete the definitions of flare and vapor combustor. The definitions of these terms in §115.10 have been superceded by the corresponding definitions of these terms in 30 TAC §101.1, concerning Definitions. (See the December 17, 1999 issue of the *Texas Register* (24 TexReg 11494)). The commission added the definitions of flare and vapor combustor to §115.10 on June 30, 1999 as placeholders until definitions of these terms could be added to §101.1. (See the July 16, 1999 issue of the *Texas Register* (24 TexReg 5488)).

In addition, the amendments to §115.10 delete the definition of vapor recovery system and combine it with the definition of vapor control system. The existing definitions of vapor recovery system and vapor control system are identical, and the commission is in the process of a transition in the Chapter 115 rules to the term "vapor control system" from the misleading term "vapor recovery system," which is defined to include both recovery and combustion control devices. Combining both terms under the definition of vapor control system will facilitate this transition.

The amendments to §115.10 also revise the definitions of external floating roof and internal floating cover to more clearly specify that an external floating roof storage tank which is equipped with a self-supporting fixed roof (typically a bolted aluminum geodesic dome) is considered to be an internal floating roof storage tank for the purposes of Chapter 115 only.

In addition, the amendments to §115.10 add a definition of incinerator because the definition of this term in §101.1 specifically refers to devices used to combust solid or liquid materials. However, the term “incinerator,” when used throughout Chapter 115, refers to control devices used to combust VOC

vapors. The new definition will clarify the meaning of this term as used in Chapter 115. Subsequent definitions in §115.10 were renumbered due to the addition of the definition of incinerator.

The amendments to §115.10 also add a definition of liquefied petroleum gas in order to clarify the exemptions in §115.217(a)(3) and (b)(4) for loading and unloading of liquefied petroleum gas. Before the commission adopted revisions on June 30, 1999 (effective date: July 21, 1999), the previous versions of these exemptions referred to the safety rules of the Liquefied Petroleum Gas Division of the Texas Railroad Commission (RRC), which regulates many aspects of the handling and transport of liquefied petroleum gas. Because these exemptions historically referred to the RRC rules, it follows logically that the term “liquified petroleum gas” was intended to have the same meaning as defined in those RRC rules (specifically, 16 TAC §9.2(32), effective March 2, 1998). The National Fire Protection Association, which develops and publishes fire codes and safety standards, has a definition of liquefied petroleum gas in *Standard 58 - Standard for the Storage and Handling of Liquefied Petroleum Gases* which is functionally identical to the RRC’s definition. Furthermore, Section 3-1 of the *Petroleum Products Handbook*, First Edition (Virgil B. Guthrie, editor), states that this is the most commonly used definition of liquefied petroleum gas. Therefore, the adopted definition of liquefied petroleum gas is consistent with other Texas state rules and industrial reference materials.

In addition, the amendments to §115.10 revise the definition of polymer and resin manufacturing process by replacing the "and" with "or" to make it clear that a manufacturing process only has to manufacture a listed polymer or a listed resin, but not both, in order to meet the definition. This

amendment will make the definition consistent with the usage of this definition in the fugitive monitoring rules for ozone nonattainment areas (§§115.352 - 115.357 and 115.359).

The amendments to §115.10 also revise the definition of synthetic organic chemical manufacturing process by replacing the reference to Table I (Synthetic Organic Chemicals) with a reference to 40 Code of Federal Regulations (CFR) 60.489 (effective October 18, 1983). Concurrently, Table I is being deleted. The list of affected chemicals is unchanged because Table I was derived from the corresponding table in 40 CFR 60.489.

Finally, the amendments to §115.10 revise the definition of transport vessel to delete the ambiguous term "primarily." The revision will clearly specify that a transport vessel includes any land-based mode of transportation (truck or rail) of oil, gasoline, or other volatile organic liquid bulk cargo in a storage tank which has a capacity greater than 1,000 gallons. This has always been the interpretation of the term "transport vessel," so this revision simply makes that interpretation more clear.

The new §115.120, concerning Vent Gas Definitions, adds definitions of bakery oven, synthetic organic chemical manufacturing industry batch distillation operation, synthetic organic chemical manufacturing industry batch process, synthetic organic chemical manufacturing industry distillation operation, synthetic organic chemical manufacturing industry distillation unit, and synthetic organic chemical manufacturing industry reactor process. These definitions are being concurrently relocated from the §115.10, concerning Definitions, because they are used solely within the Chapter 115 vent gas rules (§§115.121 - 115.123, 115.125 - 115.127, and 115.129).

The amendments to §115.122, concerning Control Requirements, change the 30% emission reduction requirement from the 1990 baseline EI for major source bakeries in HGA to an 80% emission reduction requirement from the uncontrolled VOC emission rate of the oven(s) and establish a December 31, 2001 compliance date. The amendments to §115.122 also change the baseline for major source bakeries in the DFW ozone nonattainment area from the 1990 baseline EI to the uncontrolled VOC emission rate of the oven(s). In addition, the amendments to §115.122 update rule cross-references; update references from "standard exemption" to "permit by rule" due to the requirements of Senate Bill (SB) 766, which amended the Texas Clean Air Act (TCAA) and created “permits by rule;” change references from "Centigrade" to “Celsius" since this is now the term commonly used to describe this temperature scale; and change references from “vapor recovery system” to “vapor control system” for clarification. Finally, the amendments to §115.122(a)(3)(E) change a reference from "§101.29 of this title (relating to Emissions Credit Banking and Trading)" to "Chapter 101, Subchapter H, Division 1 of this title (relating to Emission Credit Banking and Trading)" due to the repeal of §101.29 and its relocation to a new division within Chapter 101 in concurrent rulemaking published elsewhere in this issue of the *Texas Register*.

The amendments to §115.125, concerning Testing Requirements, extend the existing test methods to Aransas, Bexar, Calhoun, Matagorda, San Patricio, and Travis Counties; consolidate the existing §115.125(a) and (b) into a single subsection; reorganize the section by grouping related test methods together; and clarify that the test methods and procedures are to be used when testing is specifically required within this division (Vent Gas Control), when the executive director requests testing under

§101.8 (Sampling), or when the owner or operator chooses to conduct testing of one or more vent gas streams.

Because it is not reasonably possible to measure the mass emission rate from an elevated flare (an elevated flare's flame is open to the atmosphere, such that the emissions cannot be routed through a stack), the test methods for flow rate and VOC concentration in the existing §115.125(a)(3) - (6) and (b)(3) - (6), which are renumbered as §115.125(1) and (2), do not apply to flares. In order to specify performance requirements for flares, the revisions to new §115.125(3) establish the test requirements of 40 CFR 60.18(b) for flares in the Beaumont/Port Arthur (BPA), DFW, and HGA ozone nonattainment areas. Because flares cannot be stack-tested, the amendments to §115.125(3) also specify that compliance with the requirements of 40 CFR 60.18(b) represents compliance with the emission specifications of §115.121 and the control efficiency requirements of §115.122. The revisions to §115.125(3) also take into account situations in which a flare operates under a waiver from testing according to 40 CFR 60.18.

In addition, the amendments to §115.125 include an option that the owner or operator of a vapor combustor may consider it to be a flare. Each vapor combustor in Victoria County and the BPA, DFW, El Paso (ELP), and HGA areas which the owner or operator elects to consider as a flare shall meet the performance test requirements of 40 CFR 60.18(b) in lieu of any testing under §115.125(1) and (2) for a thermal or catalytic oxidizer. The amendments to §115.125 also add a new paragraph (5), which authorizes the use of test methods other than those specifically listed in §115.125, provided that any new test method is validated using the procedures in 40 CFR 63, Appendix A, Test Method 301,

with the executive director acting as the administrator. This revision is necessary because in some specific unique situations, the listed test methods may be inappropriate. The new paragraph (5) increases flexibility by allowing the use of additional test methods which may be more cost-effective and more appropriate in certain unique situations. The changes to §115.125 do not add any requirements to Aransas, Bexar, Calhoun, Matagorda, Nueces, San Patricio, and Travis Counties.

Previously, §115.126 did not include specific recordkeeping requirements for vent gas sources in Aransas, Bexar, Calhoun, Matagorda, San Patricio, and Travis Counties. The amendments to §115.126, concerning Monitoring and Recordkeeping Requirements, add recordkeeping requirements in these counties which are sufficient to document compliance with the exemptions, but do not add any continuous monitoring requirements to these counties. In addition, the amendments to §115.126 consolidate the existing §115.126(a) and (b) into a single subsection; update references to other sections; replace "true partial pressure" with the more understandable term "concentration;" revise §115.126(4) to allow use of engineering calculations to document that a vent gas stream is below the applicable exemption limits at maximum operating conditions; and add new §115.126(3)(D) and (E) for consistency with the exemptions available in §115.127(a)(4)(B) and (C).

The amendments to §115.126 also change the 30% emission reduction requirement from the 1990 baseline EI for major source bakeries in HGA to an 80% emission reduction requirement from the uncontrolled VOC emission rate of the oven(s), establish a December 31, 2001 compliance date, and require submittal of a control plan by March 31, 2001 which shows how the owner or operator will meet the emission reduction requirements. In addition, the amendments to §115.126 change the

baseline for major source bakeries in DFW from the 1990 EI to the uncontrolled VOC emission rate of the oven(s), and delete the annual reporting requirements for major source bakeries in DFW and HGA. Because the major source bakeries in DFW and HGA have installed (or are in the process of installing) catalytic oxidizers which can readily meet the control requirements and the monitoring and recordkeeping requirements will ensure that these control devices are functioning properly, there is no need for these bakeries to submit an annual report.

Finally, the amendments to §115.126 also specify that flares in BPA, DFW, and HGA must meet the requirements of 40 CFR 60.18(b) and Chapter 111; and state that records of appropriate operating parameters must be kept for types of vapor control systems not specifically listed in §115.126(1)(A) and (B). Section 115.126(1)(A)(iv) and (B) specify exhaust gas temperature monitoring of vapor combustors in Victoria County, BPA, DFW, ELP, and HGA, with an option that the owner or operator of a vapor combustor may consider it to be a flare and monitor the unit under the flare requirements specified in 40 CFR 60.18(b) and 30 TAC Chapter 111. These amendments are necessary to ensure that control devices are functioning properly and to clarify how vapor combustors are to be monitored.

Based upon information from the Air Permits Division, most existing flares meet the design and operating criteria of 40 CFR 60.18(b). The commission solicited information regarding vents in BPA, DFW, and HGA which are controlled by flares that do not meet the requirements of 40 CFR 60.18(b). In response, the commission received a comment that some flares operate under a waiver from testing according to 40 CFR 60.18. Comments received during the comment period regarding flares that

operate under a waiver from testing according to 40 CFR 60.18 are addressed in the ANALYSIS OF TESTIMONY section of this preamble.

Sources which are addressed by a Chapter 115 contingency rule (i.e., one in which Chapter 115 requirements are triggered for that source by the commission publishing notification in the *Texas Register* that implementation of the contingency rule is necessary) are subject to the requirements of Division 2, concerning Vent Gas Control, until the compliance date of that contingency rule. The purpose is to ensure that a Chapter 115 rule (either the general vent gas rule or the more specific contingency rule, but not both) applies at all times to sources addressed by a contingency rule. The amendments to §115.127(a) add a new paragraph (8) which specifies that for a source that is addressed by a Chapter 115 contingency rule, the owner or operator of that source may choose to comply with the requirements of the contingency rule as though the contingency rule already had been implemented for that source, rather than complying with Division 2. In the case of bakeries, this option would be an alternative to complying with the general vent gas control requirements of §115.121(a)(1) and §115.122(a)(1) because these currently applicable requirements are in the same division (Division 2, concerning Vent Gas Control), as the bakery contingency measure requirements.

For example, under §115.449(c) the offset printing rules of §§115.442 - 115.446 are a contingency rule for each printing operation in DFW for which all offset lithographic printing presses on a property, when uncontrolled, emit a combined weight of VOC less than 50 tons per calendar year. Such sources are currently subject to the requirements of Division 2, concerning Vent Gas Control. Under the new §115.127(a)(8), the owner or operator of such a printing operation instead has the option of complying

with the offset printing rules of §§115.442 - 115.446 as though that offset printing contingency rule had been implemented in DFW and the compliance date had already passed.

In addition, the amendments to §115.127 delete the concentration thresholds in true partial pressure and retain the more understandable concentration thresholds in parts per million by volume (ppmv).

The amendments to §115.129, concerning Counties and Compliance Schedules, specify the compliance schedule for the new requirements described earlier in this preamble; delete language which is obsolete due to the passing of the May 31, 1996 and November 15, 1996 compliance dates; and update references to other sections.

The rule amendments add the Chapter 115 batch process requirements (§§115.160 - 115.167 and 115.169) to the eight-county HGA ozone nonattainment area. The rule language is based upon the EPA's *Control of Volatile Organic Compound Emissions from Batch Processes - Alternative Control Techniques Information Document* (EPA-453/R-94-020, February 1994).

The amendments to §115.161, concerning Applicability, specify that the batch process requirements of §§115.162 - 115.167 apply to vent gas streams at batch process operations in the HGA area under the Standard Industrial Classification (SIC) codes 2821 (plastic resins and materials), 2833 (medicinals and botanicals), 2834 (pharmaceutical preparations), 2861 (gum and wood chemicals), 2865 (cyclic crudes and intermediates), 2869 (industrial organic chemicals, not elsewhere classified), and 2879 (agricultural chemicals, not elsewhere classified).

The amendments to §115.161 also specify that the existing requirements of Subchapter B, Division 2, concerning Vent Gas Control, will continue to apply to batch process operations in HGA which are exempt from §§115.162 - 115.166 because they are located at an account which has total VOC emissions (determined before control but after the last recovery device) of less than 25 tpy from all stationary emission sources at the account.

The amendments to §115.162, concerning Control Requirements, make batch process operations in HGA subject to: the applicable RACT equations for low, moderate, and high volatility materials; a successive ranking scheme which determines which sources must be controlled and which are exempt; and the EPA's "once-in, always-in" (OIAI) requirement. OIAI is an EPA concept which means that once emissions from a source exceed the applicability cutoff for a particular VOC regulation in the SIP, that source is always subject to the control requirements of the regulation. In addition, the amendments to §115.162 update references from "standard exemption" to "permit by rule" due to the requirements of SB 766, which amended the TCAA and created “permits by rule.”

Although no amendments were proposed to §115.163, concerning Alternate Control Requirements, an alternate means of control is available under this section for batch process operations in HGA.

The amendments to §115.164, concerning Determination of Emissions and Flow Rates, make batch process operations in HGA subject to the procedures for determining the uncontrolled annual emission total and the average flow rate for process vents.

The amendments to §115.165, concerning Approved Test Methods and Testing Requirements, make batch process operations in HGA subject to specified test methods and testing requirements for determining compliance with the control requirements. Minor modifications to the test methods may be used if approved by the executive director.

Because it is not reasonably possible to measure the mass emission rate from an elevated flare (an elevated flare's flame is open to the atmosphere, such that the emissions cannot be routed through a stack), the test methods for flow rate and VOC concentration do not apply to flares. In order to specify performance requirements for flares, §115.165 includes the test requirements of 40 CFR 60.18(b). Because flares cannot be stack-tested, the §115.165 also specifies that compliance with the requirements of 40 CFR 60.18(b) represents a 98% control efficiency. Based upon information from the Air Permits Division, most existing flares meet the design and operating criteria of 40 CFR 60.18(b). The commission solicited information regarding flares which are used to control emissions from batch process operations in HGA, but do not meet the requirements of 40 CFR 60.18(b). All comments received during the comment period regarding flares are addressed in the ANALYSIS OF TESTIMONY section of this preamble.

Section 115.165 also includes authorization for the use of test methods other than those specifically listed in §115.165, provided that any new test method is validated using the procedures in 40 CFR 63, Appendix A, Test Method 301, with the executive director acting as the administrator. This option is included in §115.165 because in some specific unique situations the listed test methods may be

inappropriate. The availability of this option increases flexibility by allowing the use of additional test methods which may be more cost-effective and more appropriate in certain unique situations.

The amendments to §115.166, concerning Recordkeeping Requirements, make batch process operations in HGA subject to requirements for: continuous monitoring and recording of control device operating parameters; recordkeeping of the annual mass emission total, average flow rate, and associated documentation for each process vent; and the control device operating parameters to be measured and recorded during performance testing. The amendments also change an incorrect reference in §115.166(1) from "VOC transfer operations" to "batch process operations." As a result of this correction, the term "VOC" is being spelled out in §115.166(1)(A)(iii)(II).

The amendments to §115.167, concerning Exemptions, make the following exemptions available in HGA: batch process operations which are located at an account in HGA which has total VOC emissions (determined before control but after the last recovery device) of less than 25 tpy; single unit operations that have a mass annual emissions of 500 pounds per year or less; and combined vents from a batch process train which have a mass annual emissions total below specified levels which vary depending on the volatility of the VOCs. In addition, the amendments revise the existing exemption in §115.167(2) to clarify that §115.164, concerning Determination of Emissions and Flow Rates, is to be used for determining if the exemptions available under §115.167(2) are met. The amendments to §115.167 also specify that the existing requirements of Subchapter B, Division 2, concerning Vent Gas Control, will continue to apply to batch process operations which qualify for exemption because they

are located at an account in HGA which has total VOC emissions (determined before control but after the last recovery device) of less than 25 tpy.

The amendments to §115.169, concerning Counties and Compliance Schedules, specify the newly affected counties in HGA (Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller) and a December 31, 2002 compliance date for the new requirements. The amendments to §115.169 also specify that batch process operations which are subject to the requirements of §§115.162 - 115.166 must continue to comply with the existing requirements of Subchapter B, Division 2, concerning Vent Gas Control, until these batch process operations are in compliance with the new requirements.

The amendments to §115.211, concerning Emission Specifications, delete a reference to gasoline bulk plants which is no longer necessary due to the deletion of the gasoline bulk plant emission specification adopted by the commission on November 10, 1999. (See the November 26, 1999 issue of the *Texas Register* (24 TexReg 10559)).

The amendments to §115.212, concerning Control Requirements, revise §115.212(a)(3) and (b)(3) to state that the requirements regarding vapor and liquid leaks during land-based VOC transfer apply specifically to transport vessels. This revision is necessary in order to clarify that the requirements are not intended to apply to vessels which do not meet the definition of “transport vessel” in §115.10 (for example, drums). In addition, the amendments to §115.212 update references from "standard

exemption" to "permit by rule" due to the requirements of SB 766, which amended the TCAA and created “permits by rule.”

The amendments to §115.216, concerning Monitoring and Recordkeeping Requirements, revise §115.216(3)(A)(i) to only require records of the identification number of tank-truck tanks for which annual leak testing is required under §115.214(a)(1)(C) or (b)(1)(C), rather than all tank-truck tanks as is currently required. This amendment is adopted because it is unnecessary to track the identification number of tank-truck tanks which are excluded from the annual leak testing requirements.

The new §115.240, concerning Stage II Vapor Recovery Definitions, adds definitions of independent small business marketer of gasoline, and owner or operator of a motor vehicle fuel dispensing facility. These definitions are being concurrently relocated from the §115.10, concerning Definitions, because they are used solely within the Chapter 115 Stage II vapor recovery rules (§§115.241 - 115.249).

The new §115.430, concerning Flexographic and Rotogravure Printing Definitions, adds definitions of flexographic printing process, packaging rotogravure printing, publication rotogravure printing, and rotogravure printing. These definitions are being concurrently relocated from the §115.10, concerning Definitions, because they are used solely within the Chapter 115 flexographic and rotogravure printing rules (§§115.432, 115.433, 115.435 - 115.437, and 115.439). In addition, the commission changed the title of Subchapter E, Division 3 from "Graphic Arts (Printing) by Rotogravure and Flexographic Processes" to "Flexographic and Rotogravure Printing" in order to more clearly specify the operations addressed by to this division.

HGA is classified as a severe ozone nonattainment area and the major source definition includes VOC sources with emissions of 25 tpy and higher. Because FCAA, 42 USC, §7511a(b)(2), requires that RACT be applied to major sources, the amendments to §115.449, concerning Counties and Compliance Schedules, implement the offset lithographic printing rule in HGA for sources with VOC emissions equal to or greater than 25 tpy and establishes a compliance date of December 31, 2002. The offset lithographic printing rule is currently a contingency rule for HGA; after the effective date of these amendments, the rule will be a contingency rule for offset lithographic printers in HGA with VOC emissions below 25 tpy.

EFFECT ON SITES SUBJECT TO THE FEDERAL OPERATING PERMIT PROGRAM

Since Chapter 115 is an applicable requirement under 30 TAC Chapter 122, owners or operators subject to the Federal Operating Permit Program must, consistent with the revision process in Chapter 122, revise their operating permit to include the revised Chapter 115 requirements for each emission unit affected by the revisions to Chapter 115 at their site.

FINAL REGULATORY IMPACT ANALYSIS DETERMINATION

The commission has reviewed the rulemaking in light of the regulatory analysis requirements of Texas Government Code, §2001.0225, and has determined that the rulemaking does not meet the definition of a "major environmental rule" as defined in that statute. "Major environmental rule" means a rule the specific intent of which is to protect the environment or reduce risks to human health from environmental exposure and that may adversely affect in a material way the economy, a sector of the

economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state.

These adopted rules do not meet any of the four applicability criteria for requiring a regulatory analysis of "major environmental rule" as defined in the Texas Government Code. Section 2001.0225 applies only to a major environmental rule the result of which is to: 1) exceed a standard set by federal law, unless the rule is specifically required by state law; 2) exceed an express requirement of state law, unless the rule is specifically required by federal law; 3) exceed a requirement of a delegation agreement or contract between the state and an agency or representative of the federal government to implement a state and federal program; or 4) adopt a rule solely under the general powers of the agency instead of under a specific state law.

As discussed earlier in this preamble, this rule adoption is one element of the control strategy for the HGA SIP. Adoption and implementation of this control strategy is necessary in order for the HGA nonattainment area to comply with the requirements of the FCAA and achieve attainment for ozone. Additional elements of the control strategy for the HGA SIP are being adopted concurrently in this issue of the *Texas Register*, or were included in the HGA SIP considered by the commission on December 6, 2000, and planned to be submitted to the EPA by December 31, 2000.

The amendments to Chapter 115 are one element of the HGA Attainment Demonstration SIP and will require VOC emission reductions from batch processes, offset lithographic printers, and bakeries in the HGA ozone nonattainment area. While the rules are intended to protect the environment, based on the

analysis provided earlier in this preamble and in particular, the discussion in the FISCAL NOTE: COSTS TO STATE AND LOCAL GOVERNMENT and the PUBLIC BENEFIT AND COSTS sections in the rule proposal preamble (see the August 25, 2000 issue of the *Texas Register* (25 TexReg 8258)), the commission does not believe that the rules will adversely affect, in a material way, the operation of certain batch processes, offset lithographic printers, and bakeries. The commission does not believe these entities comprise a sector of the economy, or that these rules will adversely affect in a material way the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state.

The amendments do not meet the definition of a "major environmental rule" as defined in the Texas Government Code, and they do not meet any of the four applicability requirements listed in §2001.0225(a). Specifically, the rules do not exceed an express standard set by federal law since they implement requirements of the FCAA. Under 42 USC, §7410, states are required to adopt a SIP which provides for "implementation, maintenance, and enforcement" of the primary NAAQS in each air quality control region of the state. These rules were developed in order to meet FCAA, 42 USC, §7511a(b)(2)(C), which requires states to ensure that RACT is in place for all major VOC sources in moderate and above ozone nonattainment areas. This will enable the Chapter 115 batch process, offset lithographic printing, and bakery rules for HGA to be federally approvable. This rulemaking is also intended to obtain VOC emission reductions which will result in reductions in ozone formation in the HGA ozone nonattainment area and help bring HGA into compliance with the air quality standards established under 42 USC, §7410. While 42 USC, §7410, does not require specific programs, methods, or reductions in order to meet the standard, state SIPs must include "enforceable emission

limitations and other control measures, means or techniques (including economic incentives such as fees, marketable permits, and auctions of emissions rights), as well as schedules and timetables for compliance as may be necessary or appropriate to meet the applicable requirements of this chapter," (meaning 42 USC, Chapter 85, Air Pollution Prevention and Control). It is true that the FCAA does require some specific measures for SIP purposes, such as the inspection and maintenance program, but those programs are the exception, not the rule, in the SIP structure of the FCAA. The provisions of the FCAA recognize that states are in the best position to determine what programs and controls are necessary or appropriate in order to meet the NAAQS. This flexibility allows states, affected industry, and the public, to collaborate on the best methods for attaining the NAAQS for the specific regions in the state. Even though the FCAA allows states to develop their own programs, this flexibility does not relieve a state from developing a program that meets the requirements of 42 USC, §7410. In order to avoid federal sanctions, states are not free to ignore the requirements of 42 USC, §7410, and must develop programs to assure that the nonattainment areas of the state will be brought into attainment on schedule. Thus, while specific measures are not prescribed, both a plan and emission reductions are required to assure that the nonattainment areas of the state will be able to meet the attainment deadlines set by the FCAA. The EPA has provided the criteria for both the submission and evaluation of attainment demonstrations developed by states to comply with the FCAA. This criteria requires states to provide, in addition to other information, photochemical modeling and an analysis of specific emission reduction strategies necessary to attain the NAAQS. The commission's photochemical modeling and other analysis indicate that substantial emission reductions from both mobile and point source categories are necessary in order to demonstrate attainment. In this case, this rulemaking is intended to serve two purposes; one is to satisfy 42 USC, §7511a(b)(2)(C), and the second is to achieve

reductions in the HGA nonattainment area. Specifically, as noted elsewhere in this rule preamble, the emission reductions associated with these rules are a necessary element of the attainment demonstration required by the FCAA.

During the 75th Legislative Session, SB 633 amended the Texas Government Code to require agencies to perform a regulatory impact analysis (RIA) of certain rules. The intent of SB 633 was to require agencies to conduct an RIA of extraordinary rules. These are identified in the statutory language as major environmental rules that will have a material adverse impact and will exceed a requirement of state law, federal law, or a delegated federal program, or are adopted solely under the general powers of the agency. With the understanding that this requirement would seldom apply, the commission provided a cost estimate for SB 633 that concluded "based on an assessment of rules adopted by the agency in the past, it is not anticipated that the bill will have significant fiscal implications for the agency due to its limited application." The commission also noted that the number of rules that would require assessment under the provisions of the bill was not large. This conclusion was based, in part, on the criteria set forth in the bill that exempted proposed rules from the full analysis unless the rule was a major environmental rule that exceeds a federal law. As discussed earlier in this preamble, the FCAA does not require specific programs, methods, or reductions in order to meet the NAAQS; thus, states must develop programs for each nonattainment area to ensure that area will meet the attainment deadlines. Because of the ongoing need to address nonattainment issues, the commission routinely proposes and adopts SIP rules. The legislature is presumed to understand this federal scheme. If each rule proposed for inclusion in the SIP was considered to be a major environmental rule that exceeds federal law, then every SIP rule would require the full RIA contemplated by SB 633. This conclusion

is inconsistent with the conclusions reached by the commission in its cost estimate and by the Legislative Budget Board (LBB) in its fiscal notes. Since the legislature is presumed to understand the fiscal impacts of the bills it passes, and that presumption is based on information provided by state agencies and the LBB, the commission believes that the intent of SB 633 was only to require the full RIA for rules that are extraordinary in nature. While the SIP rules will have a broad impact, that impact is no greater than is necessary or appropriate to meet the requirements of the FCAA.

The commission has consistently applied this construction to its rules since this statute was enacted in 1997. Since that time, the legislature has revised the Texas Government Code but left this provision substantially unamended. It is presumed that "when an agency interpretation is in effect at the time the legislature amends the laws without making substantial change in the statute, the legislature is deemed to have accepted the agency's interpretation." *Central Power & Light Co. v. Sharp*, 919 S.W.2d 485. 489 (Tex. App.–Austin 1995), *writ denied with per curiam opinion respecting another issue*, 960 S.W.2d 617 (Tex. 1997); *Bullock v. Marathon Oil Co.*, 798 S.W.2d 353, 357 (Tex. App.–Austin 1990, no writ). *Cf. Humble Oil & Refining Co. v. Calvert*, 414 S.W.2d 172 (Tex. 1967); *Sharp v. House of Lloyd*, Inc., 815 S.W.2d 245 (Tex. 1991); *Southwestern Life Ins. Co. v. Montemayor*, 24 S.W.3d 581 (Tex. App.--Austin 2000, *pet. denied*); and *Coastal Indust. Water Auth. v. Trinity Portland Cement Div.*, 563 S.W.2d 916 (Tex. 1978).

The commission's interpretation of the RIA requirements is also supported by a change made to the Administrative Procedure Act (APA) by the legislature in 1999. In an attempt to limit the number of rule challenges based upon APA requirements, the legislature clarified that state agencies are required

to meet these sections of the APA against the standard of "substantial compliance." Texas Government Code, §2001.035. The legislature specifically identified Texas Government Code, §2001.0225 as falling under this standard. The commission has substantially complied with the requirements of §2001.0225.

For these reasons, rules adopted for inclusion in the SIP fall under the exception in Texas Government Code, §2001.0225(a), because they are specifically required by federal law. FCAA, 42 USC, §7511a(b)(2)(C), requires states to ensure that RACT is in place for all major VOC sources in moderate and above ozone nonattainment areas. This rulemaking is not an express requirement of state law, but was developed specifically in order to ensure that RACT is in place for all major VOC sources in the HGA ozone nonattainment area as required under federal law. This will enable the Chapter 115 batch process, offset lithographic printing, and bakery rules for HGA to be federally approvable. This rulemaking is also intended to obtain VOC emission reductions which will result in reductions in ozone formation in the HGA ozone nonattainment area and help bring HGA into compliance with the air quality standards established under federal law as NAAQS for ozone. The rulemaking does not exceed a standard set by federal law, exceed an express requirement of state law (unless specifically required by federal law), or exceed a requirement of a delegation agreement. The rulemaking was not developed solely under the general powers of the agency, but was specifically developed to meet the RACT requirements and NAAQS established under federal law and authorized under TCAA, §§382.011, 382.012, and 382.017. Thus, the commission is not required to conduct a regulatory analysis as provided in Texas Government Code, §2001.0225. Comments received during the comment period regarding the draft RIA are addressed in the ANALYSIS OF TESTIMONY section of this preamble.

TAKINGS IMPACT ASSESSMENT (TIA)

The commission evaluated this rulemaking action and performed an analysis of whether the rules are subject to Texas Government Code, Chapter 2007. The following is a summary of that analysis. The specific purpose of the rulemaking is twofold: to ensure that RACT is in place for all major VOC sources in the HGA ozone nonattainment area in order to conform with the EPA's RACT requirements, thus enabling the Chapter 115 batch process, offset lithographic printing, and bakery rules for HGA to be federally approvable; and to obtain VOC emission reductions which will result in reductions in ozone formation in the HGA ozone nonattainment area and help bring HGA into compliance with the air quality standards established under federal law as NAAQS for ozone.

Texas Government Code, §2007.003(b)(4), provides that Chapter 2007 does not apply to these adopted rules since they are reasonably taken to fulfill an obligation mandated by federal law. The rules fulfill federal mandates under the 1990 Amendments to 42 USC, §7410 and §7511a(b)(2). Specifically, 42 USC, §7511a(b)(2)(C), requires states to ensure that RACT is in place for all major VOC sources in moderate and above ozone nonattainment areas. In addition, the emission limitations and control requirements within this rulemaking were developed in order to meet the NAAQS for ozone set by the EPA under 42 USC, §7409. States are primarily responsible for ensuring attainment and maintenance of NAAQS once the EPA has established them. Under 42 USC, §7410, and related provisions, states must submit, for approval by the EPA, SIPs that provide for the attainment and maintenance of NAAQS through control programs directed to sources of the pollutants involved. Therefore, the purpose of this rulemaking is to ensure that RACT is in place for all major VOC sources in the HGA ozone nonattainment area as required under federal law and to meet the air quality standards established

under federal law as NAAQS. Attainment of the ozone standard will eventually require substantial NO_x reductions as well as VOC reductions. Any VOC reductions resulting from the current rulemaking are no greater than what scientific research indicates is necessary to achieve the desired ozone levels. However, this rulemaking is only one step among many necessary for attaining the ozone standard.

In addition, Texas Government Code, §2007.003(b)(13), states that Chapter 2007 does not apply to an action that: 1) is taken in response to a real and substantial threat to public health and safety; 2) is designed to significantly advance the health and safety purpose; and 3) does not impose a greater burden than is necessary to achieve the health and safety purpose. Although the rule revisions do not directly prevent a nuisance or prevent an immediate threat to life or property, they do prevent a real and substantial threat to public health and safety and significantly advance the health and safety purpose. This action is taken in response to the HGA area exceeding the federal ambient air quality standard for ground-level ozone, which adversely affects public health, primarily through irritation of the lungs. The action significantly advances the health and safety purpose by reducing ambient VOC and ozone levels in HGA. Consequently, these rules meet the exemption in §2007.003(b)(13).

The commission has included elsewhere in this preamble its reasoned justification for adopting this strategy and has explained why it is a necessary component of the SIP, which is federally mandated. This discussion, as well as the HGA SIP which is being adopted concurrently, explains in detail that every rule in the HGA SIP package is necessary and that none of the reductions in those packages represent more than is necessary to bring the area into attainment with the NAAQS. This rulemaking therefore meets the requirements of Texas Government Code, §2007.003(b)(4) and (13). For these

reasons the rules do not constitute a takings under Chapter 2007 and do not require additional analysis. Comments received during the comment period regarding the TIA are addressed in the ANALYSIS OF TESTIMONY section of this preamble.

COASTAL MANAGEMENT PROGRAM CONSISTENCY REVIEW

The commission has determined that this rulemaking relates to an action or actions subject to the Texas Coastal Management Program (CMP) in accordance with the Coastal Coordination Act of 1991, as amended (Texas Natural Resources Code, §§33.201 et seq.), and the commission's rules in 30 TAC Chapter 281, Subchapter B, concerning Consistency with Texas Coastal Management Program. As required by 31 TAC §505.11(b)(2) and 30 TAC §281.45(a)(3), relating to actions and rules subject to the CMP, commission rules governing air pollutant emissions must be consistent with the applicable goals and policies of the CMP. The commission has reviewed this action for consistency with the CMP goals and policies in accordance with the regulations of the Coastal Coordination Council. For this rulemaking, the commission has determined that the rules are consistent with the applicable CMP goal expressed in 31 TAC §501.12(1) of protecting and preserving the quality and values of coastal natural resource areas and the policy in 31 TAC §501.14(q), which requires that the commission protect air quality in coastal areas. This rulemaking is intended to reduce overall emissions of VOC from batch process vent gas streams, bakeries, and offset lithographic printers. This action is consistent with the CMP because it does not authorize any new emissions and will reduce existing emissions of VOC. No comments were received during the comment period regarding the CMP consistency review.

HEARINGS AND COMMENTERS

The commission held public hearings on this proposal at the following locations: September 18, 2000, in Conroe and Lake Jackson; September 19, 2000 in Houston (two hearings); September 20, 2000, in Katy and Pasadena; September 21, 2000, in Beaumont, Amarillo, and Texas City; September 22, 2000, in Dayton, El Paso, and Arlington; and September 25, 2000, in Austin and Corpus Christi. The comment period closed at 5:00 p.m. on September 25, 2000.

Forty-nine commenters submitted testimony on the proposal. Pasadena Paper Company LP, Pasadena Pulp Company LP, and Donohue Industries Incorporated submitted joint comments and will be referred to as Pasadena/Donohue. Chevron Phillips Chemical Company LP (Chevron); Dynegy, Incorporated (Dynegy); Dow Chemical Company (Dow); Enron; Equistar Chemicals LP (Equistar); ExxonMobil; Goodyear Rubber and Tire Company (Goodyear); Lyondell-Citgo Refining LP (LCR); Lyondell Chemical Company (Lyondell); Phillips 66 Company (Phillips 66); Reliant Energy, Incorporated (REI); and Valero Refining Company-Texas (Valero) supported the comments submitted by the Business Coalition for Clean Air (BCCA); therefore, references to BCCA will include references to these commenters. Chevron, Dow, Equistar, ExxonMobil, Lyondell, and Phillips 66 supported the comments submitted by the Texas Chemical Council (TCC); therefore, references to TCC will include references to these commenters. Pasadena/Donohue supported the comments submitted by the Texas Pulp and Paper Industry Environmental Council (TPIEC).

The League of Women Voters of Texas (LWV-TX) and nine individuals supported the proposed revisions, while Hispanic Community of Texas Citizens for a Sound Economy (TCSE-HC); RMT, Inc.

on behalf of Montgomery County (Montgomery Co.); and three individuals opposed the proposed revisions. Baker Botts L.L.P. (Baker Botts); BCCA; Chevron; City of Missouri City (Missouri City); City of Spring Valley (Spring Valley); Dow; Dynegy; Enron; EPA; Equistar; ExxonMobil; Galveston-Houston Association for Smog Prevention (GHASP); Goodyear; Grandparents of East Harris County (GEHC); Harris County Judge Robert Eckels (Harris County); LCR; Lyondell; Pasadena/Donohue; Phillips 66; Printing Industries of the Gulf Coast (PIGC); REI; Sierra Club - Houston Regional Group (Sierra-Houston); State Senator Carlos Truan; TCC; TPIEC; Texas Oil and Gas Association (TxOGA); Union Carbide Corporation (Union Carbide); Valero; and six individuals supported the proposed revisions but suggested changes or clarifications.

ANALYSIS OF TESTIMONY

LWV-TX and nine individuals supported the proposed revisions to Chapter 115.

The commission appreciates the support.

One individual commented that the rules go beyond anything necessary to protect the environment, the basis and analysis in the rules is flawed, and the rules are being set up to embarrass Texas and the Governor, and the individual hopes that state legislators and the United States Congress would investigate these plans. The individual also commented that the TNRCC and the EPA should be downsized because less government is better than more government.

The commission does not agree that the rules are too broad or that the basis or analysis of the rules is flawed. Title 42 USC, §7511a(b)(2)(C), requires states to ensure that RACT is in place for all major VOC sources in moderate and above ozone nonattainment areas. As discussed earlier in the preamble, the EPA has stated that the existing Chapter 115 vent gas rules do not represent RACT for batch processes in HGA, and consequently it is necessary to implement the Chapter 115 batch process rules in HGA. In addition, the EPA has identified a variety of deficiencies in the existing Chapter 115 bakery rule for HGA. Finally, there are an estimated 20 major source offset printers in HGA for which RACT rules have not been implemented. Correction of these deficiencies is necessary to ensure the implementation of RACT in HGA such that these rules are federally approvable. Further, the adopted rules are specifically developed to meet the ozone NAAQS set by the EPA under 42 USC, §7409. Title 42 USC, §7410, requires states to adopt a SIP which provides for "implementation, maintenance, and enforcement" of the primary NAAQS in each air quality control region of the state. The commission's intent is not to embarrass Texas and the Governor but instead to comply with the timelines provided in 1990 FCAA amendments and subsequent EPA guidance for submitting rules to demonstrate ozone attainment in HGA. Accordingly, Texas has committed to adopting the majority of the necessary rules for the HGA attainment demonstration by December 31, 2000.

GEHC and two individuals stated that facilities that predate the commission's air permitting requirements (i.e., those that are "grandfathered") should be subject to the emission specifications. GHASP commented that all grandfathered facilities should be investigated to be certain that they are properly so designated since many of these facilities have made modifications. State Senator Carlos

Truan commented that a problem with the proposed rules is that they do not deal with grandfathered facilities and that the commission has let these facilities avoid permitting through the use of standard exemptions.

The commission has made no change in response to the comments. The adopted rules that apply to facilities, for example the Chapter 117 NO_x requirements and the Chapter 115 VOC requirements, apply to both permitted and non-permitted ("grandfathered") sources in HGA. The commission agrees that it is appropriate to pursue cost-effective measures to reduce pollution; however, any such measures must be within the statutory authority of the commission. The TCAA does not authorize the commission to require grandfathered sources to obtain permits in order to operate, or to prohibit operation of those sources. A grandfathered facility is one that existed at the time the Texas Legislature amended the TCAA in 1971. These facilities were not required to comply with (i.e., were grandfathered from) the then-new requirement to obtain permits for construction activities. Whenever a grandfathered facility is modified (as that term is defined in the TCAA), it is required to comply with the TCAA permitting requirements in order to be authorized to construct and operate that modification. If a grandfathered facility has never been modified, it continues to be authorized by the TCAA to operate without a permit. Further, the definition of "modification" specifically excludes changes to facilities that are authorized by an exemption; i.e., any facility, including a grandfathered facility, can make a change using a commission exemption (now permit by rule) and this change is not considered to be a modification that would trigger the permitting requirements of the TCAA. During the 76th Texas Legislative Session in 1999, the issue of grandfathered sources was addressed by two different legislative

programs. SB 766 was passed, which provided a framework for a voluntary permitting program for grandfathered sources under the TCAA, as well as SB 7, which requires mandatory permitting and emission reductions from electric generating facilities. The commission continues to pursue enforcement action against companies who are not in compliance with the permitting requirements of the TCAA. However, SB 766 does provide for amnesty from enforcement for facilities eligible to participate in the voluntary emission reduction permit program as long as a permit application is received before the TCAA deadline of September 1, 2001.

Baker Botts commented that it generally supports the ongoing efforts by the commission to develop a SIP that is technologically achievable, economically reasonable, and legally approvable. Baker Botts, BCCA, Dynegy, Equistar, ExxonMobil, Goodyear, Harris County Judge Robert Eckels, Phillips 66, Spring Valley, TCC, TPIEC, TxOGA, Valero, and an individual commented that the commission should incorporate into the SIP a greater level of reductions from federally preempted sources and stated that EPA-regulated sources account for about 40% of the NO_x emissions in the HGA. The commenters stated that the EPA issued a number of regulations for some federally preempted sources, such as land-based spark engines, marine, recreational and land-based diesel engines, aircraft and locomotive engines, well after the FCAA deadlines, and that the EPA recently strengthened rules for on-road and non-road vehicles and fuels, such as low sulfur gas and diesel, Tier II motor vehicles, heavy-duty highway vehicle standards, and non-road Tier II/Tier III heavy-duty engine standards. The commenters stated that delays in implementing these rules have prompted the commission to propose technically and economically infeasible emission reductions from sources in HGA that the state has authority to regulate to make up for the missing federal reductions. The commenters stated that these

delays have forced the commission to propose expensive regional fuels and significant use restriction regulations. The commenters stated that the commission and the EPA can ensure an equitable distribution of the compliance burdens necessary to meet mandated air quality improvement in HGA only by allowing the SIP to capture anticipated emission reductions from federally preempted sources. Baker Botts noted that the EPA demonstrated a willingness to assume responsibility for a portion of emission reductions by created a process in Los Angeles called a "public consultative process," that would resolve issues related to emissions from national and international sources, and that the EPA has also provided flexibility in obtaining offsets by allowing states to provide offsets to refiners based on emission reductions that the EPA projected would result from mobile sources using Tier II gasoline. Baker Botts suggested that this same sort of prospective crediting should be used to develop a more rational HGA SIP, and that the EPA should allow the commission to credit in the SIP the prospective emission reductions that will result from implementation of the Tier II gasoline rule and from other federally preempted sources. Finally, Baker Botts cited two cases wherein the District of Columbia Circuit has approved the EPA's flexibility with respect to statutory deadlines under the FCAA when the EPA has failed to meets its own deadlines, and this failure was deemed to upset the balanced federal/state responsibilities under the FCAA. ExxonMobil commented that it supports the commission and the EPA crediting the HGA SIP with an additional 60 tpd of federally preempted emission reductions that will occur over the next ten years. Harris County Judge Robert Eckels commented that the commission should work with the EPA to accelerate the implementation schedule for federally preempted emissions so that at least one-half of the related emission reductions are achieved by 2007, and that as a part of this process, the commission should delineate federal assignments detailing the engine standards and emission reductions necessary to achieve real and sustainable pollution reductions.

The commission agrees with the commenters that emission reductions from federally preempted sources would provide benefits for the HGA SIP demonstration, and the inability of the commission to regulate certain source categories has necessitated the use of other ozone control strategies. However, the commission understands that the EPA SIP approval process does not provide a mechanism for credit for emission reductions that occur after the attainment date. The commission understands that the EPA is not currently considering accelerating implementation schedules for existing federal rules. The commission is working with the EPA to determine the availability of SIP credit for many non-traditional control strategy mechanisms, like economic incentive programs and flexibility for preempted source categories. Additionally, the commission is working with the EPA to determine an appropriate federal contribution credit available for the HGA SIP.

TCSE-HC and two individuals opposed the proposed revisions to Chapter 115. Montgomery Co. opposed implementation of the proposed Chapter 115 revisions in Montgomery County, while an individual opposed implementation of the proposed Chapter 115 revisions in Chambers and Liberty Counties.

As noted earlier in this preamble, FCAA, 42 USC, §7511a(b)(2), requires implementation of RACT at major VOC sources located in moderate or above ozone nonattainment areas. The adopted rules satisfy this federal requirement and are necessary to ensure that the current SIP revision in support of the HGA ozone attainment demonstration will be federally approvable. Furthermore, the FCAA Amendments of 1990 provided new requirements for areas that had not

attained the NAAQS for ozone, carbon monoxide, particulate matter, sulfur dioxide, nitrogen dioxide, and lead, and new requirements for SIPs in general. The EPA was authorized to designate areas failing to meet the NAAQS for ozone as nonattainment and to classify them according to severity. Section 107(d)(4)(A)(iv) of the FCAA mandated that areas designated as serious, severe, or extreme for ozone that were within a metropolitan statistical area (MSA) or consolidated metropolitan statistical area (CMSA) must have boundaries that include the entire MSA or CMSA. This requirement is supported by the legislative history for the FCAA Amendments in Senate Report No. 101-228, page 3399, "Because ozone is not a local phenomenon but is formed and transported over hundreds of miles and several days, localized control strategies will not be effective in reducing ozone levels. The bill, thus, expands the size of areas that are defined as ozone nonattainment areas to assure that controls are implemented in an area wide enough to address the problem." The FCAA Amendments did provide the ability to exclude portions of the entire MSA or CMSA prior to designation, if the state conducted a study that the EPA agreed proved that the geographic portion did not contribute significantly to violation of the NAAQS.

Redesignation has not occurred for any portion of the HGA nonattainment area, and is not currently being considered. For existing areas currently included within a nonattainment area, the specific area must be redesignated as attainment to be removed from a nonattainment area. FCAA, §107(d)(3), provides that the EPA may not redesignate a nonattainment area, or a portion thereof, to attainment unless several criteria are met, which include: a determination that the area has attained the NAAQS; there is a fully approved SIP for the area; there is a determination that

the improvement in air quality is due to permanent and enforceable reductions in emissions; there is an approved maintenance plan for the area; and the state has met all requirements for the area under FCAA, §110 and Part D.

However, even if a specific area within the HGA nonattainment area was redesignated by the EPA as attainment for ozone, reductions associated from all adopted ozone control strategies would still be necessary because of the requirements of FCAA, §107(d)(3) and §175A, which require maintenance plans for all redesignated areas. The maintenance plan must include the measures specified in §107(d)(3) and any additional measures that are necessary to ensure that the area continues to be in attainment with the NAAQS for ten years after the redesignation. Eight years after the redesignation, the state is required to submit an additional revision to the SIP for maintaining the NAAQS for ten years after the end of the first ten-year period.

Additionally, reductions associated from the ozone control strategies that will be implemented outside the HGA nonattainment area will benefit the HGA nonattainment area. This is due to the regional nature of air pollution, the contribution from mobile sources, and the economies of scale and associated market advantages related to distribution networks for some strategies.

At the time the 1990 FCAA Amendments were enacted, the focus on controlling ozone pollution was centered on local controls. However, for many years an ever increasing number of air quality professionals have concluded that ozone is a regional problem requiring regional strategies in addition to local control programs. As nonattainment areas across the United States prepared

attainment demonstration SIPs in response to the 1990 FCAA Amendments, several areas found that modeling attainment was made much more difficult, if not impossible, due to high ozone and ozone precursor levels entering from the boundaries of their respective modeling domains, commonly called transport. Recent science indicates that regional approaches may provide improved control of ozone air pollution.

The commission has conducted air quality modeling and upper air monitoring that found regional air pollution should be considered when studying air quality in Texas' ozone nonattainment areas. This work is supported by research conducted by OTAG, the most comprehensive attempt ever undertaken to understand and quanitfy the transport of ozone. Both the commission and the OTAG study point to the need to take a regional approach to controlling air pollutants.

BCCA, ExxonMobil, Phillips 66, REI, and TPIEC commented on the draft RIA and stated that the proposed rules were not evaluated in accordance with the analysis requirements for a major environmental rule. The commenters stated that Texas Government Code, §2001.0225, requires an RIA for certain major environmental rules. The commenters stated that the commission must consider the benefits and costs of the proposed rule in relationship to state agencies, local governments, the public, the regulated community, and the environment. The commenters stated further that the commission must also incorporate aspects of this analysis into the fiscal note in the proposed rules (e.g., identify the costs and the benefits; describe reasonable alternative methods for achieving the purpose of the rule considered by the agency; provide the reasons for rejecting those alternatives; and identify the data and methodology used in performing the analysis). The commenters stated that under

§2001.0225(d) the commission must also find that "compared to the alternative proposals considered and rejected, the rule will result in the best combination of effectiveness in obtaining the desired results and of economic costs not materially greater than the costs of any alternative regulatory method considered."

The commenters stated that the rule proposal preamble's statement that the rules are exempt from the RIA requirement because federal law mandates the rules is a legally flawed effort to avoid an RIA and may render the rules invalid. The commenters stated that federal law does not mandate the control requirements, emission rates, and use restrictions contained in the proposal and asserted that many of the proposed rules exceed specific federal rules and standards applicable to the same sources. The commenters stated that examples of departures from the federal framework include the following: boiler, turbine and other fired equipment emission limits set well below federal new source performance standards (NSPS), RACT, best available control technology (BACT), or lowest achievable emission rate (LAER) limits for the same sources; and compressor engine emission limits set at unprecedented low levels specifically designed to be unachievable and prevent the further use of the affected engines.

The commenters stated that the rule proposal preamble acknowledges that the rule proposal's components are "major environmental rules," but that the commission asserted that an RIA is "seldom" required and is only required for "extraordinary" rules. The commenters stated that these criteria appear nowhere in the RIA requirements. The commenters stated that the rule proposal preamble states that "while the SIP rules will have a broad impact, that impact is no greater than is necessary or appropriate to meet the requirements of the FCAA." The commenters stated that this "no greater than

is necessary or appropriate" determination is the conclusion that an RIA is designed to evaluate and to offer for public review and comment. The commenters stated that the rule proposal is well beyond any federal mandates for the covered sources and are "extraordinary." The commenters stated that under Texas Government Code, §2001.0225, an RIA must be performed and offered for public comment before the proposal can be adopted.

ExxonMobil commented that simply saying that federal law requires the rules does not make it so. ExxonMobil stated that federal law, for instance, did not mandate a 90% reduction in emissions from stationary sources of NO_x, and that the commission alone decided the blend of control requirements in the proposal. ExxonMobil stated that if the commission was exempt from conducting a major environmental analysis solely because the proposal was intended to achieve compliance with the NAAQS, an analysis would never be required for any rule relating to criteria pollutants and such an approach would render Texas Government Code, §2001.0225, superfluous.

The commission does not agree that the adopted rules meet the definition of a major environmental rule, or that the commission's interpretation of the exemption for federally mandated standards is legally flawed. Further, the Draft RIA in the proposal preamble (25 TexReg 8259, August 25, 2000) did not state that the rules are major environmental rules. While the rules may require capital investments by batch processes, bakeries and offset lithographic printers, that alone is not enough to trigger the RIA requirements. The Texas Government Code, §2001.0225, only applies to a major environmental rule adopted by a state agency, the result of which is to: 1) exceed a standard set by federal law, unless the rule is specifically required by state law; 2) exceed an express requirement of state law, unless the rule is specifically required by

federal law; 3) exceed a requirement of a delegation agreement or contract between the state and an agency or representative of the federal government to implement a state and federal program; or 4) adopt a rule solely under the general powers of the agency instead of under a specific state law.

This rulemaking action does not meet any of these four applicability requirements, and is adopted in substantial compliance with the RIA requirements. Texas Government Code, §2001.035. This rule does not exceed an express standard set by federal law because 42 USC, §7511a(b)(2)(C), requires states to ensure that RACT is in place for all major VOC sources in moderate and above ozone nonattainment areas. As discussed earlier in this preamble, the EPA has stated that the existing Chapter 115 vent gas rules do not represent RACT for batch processes in HGA, and consequently it is necessary to implement the Chapter 115 batch process rules in HGA. In addition, the EPA has identified a variety of deficiencies in the existing Chapter 115 bakery rule for HGA. Finally, there are an estimated 20 major source offset printers in HGA for which RACT rules have not been implemented. Correction of these deficiencies is necessary to ensure the implementation of RACT in HGA such that these rules are federally approvable.

Further, the adopted rules are also intended to obtain VOC emission reductions which will result in reductions in ozone formation in the HGA ozone nonattainment area under 42 USC, §7409. Title 42 USC, §7410, requires states to adopt a SIP which provides for "implementation, maintenance, and enforcement" of the primary NAAQS in each air quality control region of the state. While 42 USC, §7410, does not specifically prescribe programs, methods, or reductions to

meet the federal standard, state SIPs must include "enforceable emission limitations and other control measures, means or techniques (including economic incentives such as fees, marketable permits, and auctions of emissions rights), as well as schedules and timetables for compliance as may be necessary or appropriate to meet the applicable requirements of this chapter" (meaning 42 USC, Chapter 85, Air Pollution Prevention and Control). The FCAA does require some specific measures for SIP purposes, such as an inspection and maintenance program, but those programs are the exception, not the rule, in the federal SIP structure. The provisions of the FCAA recognize that states are in the best position to determine what programs and controls are necessary or appropriate in order to meet the NAAQS. This flexibility allows states, affected industry, and the public, to collaborate on the best methods for attaining the NAAQS for the specific regions in the state. In order to avoid federal sanctions, states are not free to ignore the requirements of 42 USC, §7410, and must develop programs to assure that the nonattainment areas of the state will be brought into attainment on schedule. Failure to develop control strategies to demonstrate attainment can result in federal sanctions. Thus, while specific measures are not prescribed, both a plan and emission reductions are required to assure that the nonattainment areas of the state will be able to meet the attainment deadlines set by the FCAA. The EPA has provided the criteria for both the submission and evaluation of attainment demonstrations developed by states to comply with the FCAA. This criteria requires states to provide, in addition to other information, photochemical modeling and an analysis of specific emission reduction strategies necessary to attain the NAAQS. The commissions photochemical modeling and other analysis indicate that substantial emission reductions from both mobile and point source categories are necessary in order to demonstrate attainment. In this case, this

rulemaking is intended, in part, to achieve reductions in ozone precursor emissions in the HGA nonattainment area. Specifically, as noted elsewhere in this rule preamble, the emission reductions associated with these rules are a necessary element of the attainment demonstration required by the FCAA.

This conclusion is supported by the legislative history for Texas Government Code, §2001.0225. During the 75th Legislative Session, SB 633 amended the Texas Government Code to require agencies to perform a RIA of certain rules. The intent of SB 633 was to require agencies to conduct a RIA of major environmental rules that will have a material adverse impact, and will exceed a requirement of state law, federal law, or a delegated federal program, or are adopted solely under the general powers of the agency. The commission provided a cost estimate for SB 633 that concluded "based on an assessment of rules adopted by the agency in the past, it is not anticipated that the bill will have significant fiscal implications for the agency due to its limited application." The commission also noted that the number of rules that would require assessment under the provisions of the bill was not large. Because of the ongoing need to address nonattainment demonstrations required by federal law, the commission routinely proposes and adopts SIP rules. If each rule proposed for inclusion in the SIP was incorrectly considered as exceeding federal law, every SIP rule would require the full RIA contemplated by SB 633. This result would be inconsistent with the cost estimates and fiscal notes prepared by the commission and by the LBB. Since the legislature is presumed to understand the fiscal impacts of the bills it passes, and that presumption is based on information provided by state agencies and the LBB, the commission believes that the intent of SB 633 was only to require the full RIA for rules that meet

the requirements under §2001.0225(a). While the SIP rules will have a broad impact, that impact is no greater than is necessary or appropriate to meet the requirements of the FCAA. In other words, the adopted rules are intended to meet federal and state law, and do not go above and beyond what is required to meet federal or state statutes.

The commission has consistently applied this construction to its rules since this statute was enacted in 1997. Since that time, the legislature has revised the Texas Government Code but left this provision substantially unamended. It is presumed that "when an agency interpretation is in effect at the time the legislature amends the laws without making substantial change in the statute, the legislature is deemed to have accepted the agency's interpretation." ***Central Power & Light Co. v. Sharp*****, 919 S.W.2d 485, 489 (Tex. App.–Austin 1995),** ***writ denied with per curiam opinion respecting another issue*****, 960 S.W.2d 617 (Tex. 1997);** ***Bullock v. Marathon Oil Co.*****, 798 S.W.2d 353, 357 (Tex. App.–Austin 1990, no writ).** ***Cf. Humble Oil & Refining Co. v. Calvert*****, 414 S.W.2d 172 (Tex. 1967);** ***Sharp v. House of Lloyd*****, Inc., 815 S.W.2d 245 (Tex. 1991);** ***Southwestern Life Ins. Co. v. Montemayor*****, 24 S.W.3d 581 (Tex. App.--Austin 2000,** ***pet. denied*****); and** ***Coastal Indust. Water Auth. v. Trinity Portland Cement Div.*****, 563 S.W.2d 916 (Tex. 1978).**

The commission's interpretation of the RIA requirements is also supported by a change made to the APA by the legislature in 1999. In an attempt to limit the number of rule challenges based upon APA requirements, the legislature clarified that state agencies are required to meet these sections of the APA against the standard of "substantial compliance." Texas Government Code,

§2001.035. The legislature specifically identified §2001.0225 as falling under this standard. The commission has substantially complied with the requirements of §2001.0225.

Therefore in addition to not exceeding an express standard set by federal law, these rules do not exceed state requirements, and are not adopted solely under the general powers of the agency because the provisions of the TCAA, §§382.011, 382.012, and 382.017, authorize the commission to implement a plan for the control of the states air quality, including measures necessary to meet federal requirements. The remaining applicability criteria, pertaining to exceeding a delegation agreement or contract between the state and the federal government does not apply. Thus, the commission is not required to conduct a regulatory analysis as provided in Texas Government Code, §2001.0225.

Phillips 66 and TPIEC stated that the TCAA, §382.011(b), authorizes rules for controlling air contaminants by all practical and economically feasible methods. REI commented that the proposed emission limitations have been developed with less than a complete analysis of the technical or economic feasibility of the resulting controls or an analysis of the possible environmental or economic disbenefit of the proposed controls. TPEIC commented that under Texas Government Code, §2001.033(a)(1)(B), the rule must have a reasoned justification that includes a summary of the factual basis for the rule that demonstrates a rational connection between the factual basis for the rule and the rule as adopted. The commenters stated that under Texas Government Code, §2001.035(c), the justification must demonstrate in a relatively clear and logical fashion that the rule is a reasonable means to a legitimate objective. The commenters asserted that a rule that would impose an air emission

abatement requirement that is not demonstrated to be practical and economically feasible is directly contrary to the TCAA and that promulgating such a rule without a reasoned justification is inconsistent with the Texas Government Code.

The commission disagrees with the commenters and has made no change in response to these comments. The proposed rules contained an analysis of information available to the commission regarding the costs and benefits of the proposed rules. This information met the statutory requirements of the TCAA and the APA because the information provided in the proposed rules was sufficient for commenters to submit alternative assessments of the costs and benefits.

Adequate notice is essential for fairness as well as a meaningful opportunity to comment on a proposed rule. *United Loans, Inc. v. Pettijohn*, 955 S.W.2d 649, 651 (Tex. App.-Austin 1997). To achieve the goal of encouraging meaningful public participation in the formulation and adoption of rules by state agencies, the notice must have sufficient information so that interested persons can determine whether it is necessary for them to participate in order to protect their legal rights and privileges. The preamble for the proposed rules contained a discussion of the FCAA requirements concerning RACT for these affected sources, a detailed section by section discussion of the proposed changes, a fiscal note, including the cost to state and local governments, the public benefit and the estimated costs for the affected sources, a small and micro-business analysis, a draft RIA, a TIA, and a CMP consistency determination. The commission received a number of comments that addressed multiple aspects of the adopted rules. Therefore, the commission

believes this goal has been achieved and that the notice includes sufficient information to constitute adequate notice.

The commission believes that the preamble for the proposed rules provided adequate information that demonstrates that the adopted rules are economically and practically feasible. These rules do not require the installation of technology that is out of the ordinary; for example, some facilities might install thermocouples or catalytic oxidizers or use non-alcohol fountain solutions. The commission does not believe that these options or others similar to them are not economically and practically feasible. In fact, many facilities covered by the rules have already installed the controls necessary to comply. To simply state that the proposal did not meet the statute or that compliance with the proposed rules is not technically or economically feasible does not provide the commission with sufficient information to propose changes or alternative strategies. There is no requirement that the commission determine the probable economic cost of the unique aspects of every facility or source that must comply, nor give the probable economic cost of every possible method of control. Rather, the notice must include the cost of a reasonable method of compliance. Mere disagreement with cost or technical feasibility estimates does not render notice inadequate. The commenters did not say how the notice is insufficient, merely that it is insufficient. Nevertheless, the commission has reviewed the notice and has determined it is adequate. The commission did not receive specific comments on the technical or economic feasibility of the adopted rules.

The commission has provided a "reasoned justification" for the rules in this adoption package as required by Texas Government Code, §2001.033. The requirement for a reasoned justification applies to the agency order finally adopting a rule. The standard for compliance with the reasoned justification requirement is substantial compliance, as determined by the Legislature, which amended the reasoned justification requirement in 1999. The commission has provided the factual, policy and legal bases for the rule, as required. The Texas Government Code, §2001.024, requires only "a brief explanation" of the rule upon proposal in addition to other elements such as the fiscal note and public benefit evaluations. Both the rule proposal and adoption meet all of the requirements of the APA.

BCCA, ExxonMobil, Phillips 66, REI, and TPIEC stated that the proposed rules did not include adequate notice as required under Texas Government Code, §2002.024. The commenters stated that Texas Government Code, §2001.024, requires adequate notice of a proposed rule, including information about its public benefits and costs. The commenters stated that adequate notice is essential for fairness as well as a meaningful opportunity to comment on a proposed rule, and that courts have considered notice "adequate" only if: interested persons can confront the agency's factual suppositions and policy preconceptions; and the agency provides interested parties the opportunity to challenge the underlying factual data relied upon by the agency. The commenters asserted that in proposing the rules, the commission failed to provide interested parties with sufficient information to constitute adequate notice.

The commenters stated that the rule proposal preamble appears short of adequate notice because the cost estimates were “dramatically underestimated.” The commenters stated that the commission published insufficient information and analysis regarding costs and impacts.

The commenters stated that the commission published insufficient information and analysis regarding costs and impacts. The commenters stated that the commission “has not been completely responsive to stakeholder requests for information necessary to comment effectively” and “dramatically underestimated" the costs of the proposed control strategies, and that as a result, the notice of the proposal is inadequate.

The commenters stated that it has identified a number of critical gaps in the underlying factual data, methodology, and analysis in support of the proposed rules. The commenters asserted that the proposal included insufficient information and analysis regarding costs and impacts. The commenters asserted that the commission has not adequately responded to requests for additional information from stakeholders. The commenters stated that the following requests for information were outstanding: information regarding the modeling of emissions; information regarding the corrected EI database; and information supporting the estimated costs of control. The commenters stated that this information is necessary in order to comment effectively on the proposed rules and that data gaps in the proposal hindered effective comment.

The commission disagrees with the commenters and has made no change in response to these comments. Texas Government Code, §2001.024, requires of the notice of a proposed rule include

certain information. Subsection (a)(5) requires that the notice state the public benefits expected as a result of the adoption of the proposed rule and the probable economic cost to persons required to comply with the rule. Adequate notice is essential for fairness as well as a meaningful opportunity to comment on a proposed rule. *United Loans, Inc. v. Pettijohn*, 955 S.W.2d 649, 651 (Tex. App.-Austin 1997). To achieve the goal of encouraging meaningful public participation in the formulation and adoption of rules by state agencies, the notice must have sufficient information so that interested persons can determine whether it is necessary for them to participate in order to protect their legal rights and privileges. The proposed rules contained an analysis of information available to the commission regarding the costs and benefits of the proposed rules. The preamble for the proposed rules contained a discussion of the FCAA requirements concerning RACT for these affected sources, a detailed section by section discussion of the proposed changes, a fiscal note, including the cost to state and local governments, the public benefit and the estimated costs for the affected sources, a small and micro-business analysis, a draft RIA, a TIA, and a CMP consistency determination. The commission received a number of comments that addressed multiple aspects of the adopted rules. Therefore, the commission believes this goal has been achieved and that the notice includes sufficient information to constitute adequate notice.

The purpose of the comment period is for the public to provide the commission with information to say why they agree or disagree. There is no requirement that the commission determine the probable economic cost of the unique aspects of every facility or source that must comply, nor give the probable economic cost of every possible method of control. Rather, the notice must include

the cost of a reasonable method of compliance. The commenters' statements that the costs were "dramatically underestimated" did not state how that conclusion was reached. Mere disagreement with cost estimates does not render notice inadequate.

The proposed rules met the requirement to include sufficient information in explaining the requirements for batch processes, offset lithographers, and bakeries, the compliance schedule, the anticipated cost of compliance and the anticipated reduction in emissions. To simply state that the proposal failed to provide sufficient information does not provide the commission with sufficient information to propose changes or alternative strategies. The commenters did not say how the notice is insufficient, merely that it is insufficient. Nevertheless, the commission has reviewed the notice and has determined it is adequate. Similarly, the comments which state there are critical gaps did not identify what those gaps are or how that results in inadequate notice. The commission is unaware of any requests for additional information to which it was not completely responsive.

BCCA, ExxonMobil, Phillips 66, REI, and TPIEC stated that the proposed rules did not include the local employment impact statement required under Texas Government Code, §2001.022. The commenters stated that Texas Government Code, §2001.022, requires the commission to determine whether the rule proposal has the potential to affect a local economy before proposing the rule for adoption. The commenters believed that if answered affirmatively, the commission must request that the Texas Employment Commission to prepare a local employment impact statement describing in detail the probable effect of the rule on employment in each geographic area affected by the rule for each year

of the first five years that the rule will be in effect. The commenters further asserted that the commission failed to make the required initial determination and ignored the potential for the proposal to adversely affect the local economy. The commenters stated that a local employment impact statement should have been requested and prepared in advance of the proposal.

The commission agrees with the commenters that the adopted rules may affect a local economy; however, it does not agree that it is the responsibility of the commission to provide the local employment impact analysis. The APA requires state agencies to determine whether a rule may affect a local economy before proposing a rule for adoption. If the agency determines that a proposed rule may affect a local economy, the agency must send a copy of the proposed rule and other information to the Texas Workforce Commission (Workforce Commission) before the agency files notice of the proposed rule with the secretary of state. The APA requires the Workforce Commission to prepare a local employment impact statement for proposed rules, if a state agency requests the statement. The commission determined that the proposed rules might affect a local economy, and sent the proposed rules and other requested information to the Workforce Commission. The commission received a letter from the Workforce Commission, indicating that the Workforce Commission did not have the ability to determine the potential local employment impacts from the proposed rules.

BCCA, ExxonMobil, Phillips 66, REI, and TPIEC stated that the proposed rules did not include an adequate TIA as required under Texas Government Code, §2007. The commenters stated that the TIA provision mandates that covered agencies "take a 'hard look' at the private real property implications of

the actions they undertake…," according to the Office of the Attorney General, *Private Real Property Rights Preservation Act Guidelines*, (21 TexReg 387, January 12, 1996). The commenters stated that under §2007.043, a TIA must describe the specific purpose of the proposed action, determine whether engaging in the proposed governmental action will constitute a taking, and describe reasonable alternative actions that could accomplish the specified purpose. The commenters stated that the agency must also explain whether these alternative actions also would constitute takings.

The commenters stated that agencies must also comply with guidelines developed by the Texas Attorney General when developing the TIA and that according to these guidelines, agencies must carefully review governmental actions that have a significant impact on the owner's economic interest. The commenters stated that these guidelines include the statement: "Although a reduction in property value alone may not be a 'taking,' a severe reduction in property value often indicates a reduction or elimination of reasonably profitable uses." (21 TexReg 392, January 12, 1996).

The commenters stated that the proposed rule preamble acknowledged that some of the rules may "burden" private real property but claimed an exemption from performing a TIA based on the assertion that the proposal does not impose a greater burden than necessary to advance a health and safety purpose and that the proposal "reasonably" fulfills a federal mandate. The commenters stated that the commission provided the public no basis to infer that a cost/benefit analysis or a reasonableness determination was, in fact, performed as necessary to support the TIA exemption claim because the preamble contains only the bare assertions. The commenters asserted that the proposed rules will impose a greater burden than is necessary, and are not reasonably taken to fulfill a federal mandate.

The commenters believed that according to the Attorney General's Guidelines, a full TIA was required to be completed with the proposal, and that failure to perform a TIA could invalidate the rules.

As stated previously in the preamble, the purpose of the adopted rules is to ensure that RACT is in place for all major VOC sources in the HGA ozone nonattainment area in order to conform with the EPA's RACT requirements, thus enabling the Chapter 115 batch process, offset lithographic printing, and bakery rules for HGA to be federally approvable; and to obtain VOC emission reductions which will result in reductions in ozone formation in the HGA ozone nonattainment area and help bring HGA into compliance with the air quality standards established under federal law as NAAQS for ozone. The commission noted in the proposal that the rules may require the installation of control systems at batch process operations, offset lithographic printers, and bakeries in HGA in some cases. The acknowledgment that the rules may require a capital expenditure or the installation of controls, is simply that, an acknowledgment. The commission understands that the rules may have an impact on real property and in noting this, sought comments on any potential impact to ensure that the adopted rules are technically and economically feasible. The commission believes that this acknowledgment has caused the commenters to misunderstand the commission's interpretation of the requirements of Texas Government Code, Chapter 2007. The commission does not believe that the assessment required by Chapter 2007 begins with a determination of whether or not the proposed rules could result in a capital expenditure. Rather, the commission believes that before an assessment is required, the commission must determine whether Chapter 2007 applies to the government action. If the proposed action is subject to an exception to Chapter 2007, the analysis

is complete. Section 2007.003(b) provides that "this chapter does not apply to the following governmental actions:…." Because the commission believes the adopted rules meet the two exceptions to Chapter 2007, the full TIA is not required for the rules. Both of these exceptions were noted in the proposal preamble.

The commission believes the adopted rules are exempt under Texas Government Code, §2007.003(b)(4) because they are reasonably taken to fulfill an obligation mandated by federal law. While several governmental actions are subject to being reviewed under Chapter 2007, including the adoption of rules, §2007.003(b)(4) specifically excludes an action that is reasonably taken to fulfill an obligation mandated by federal law. One purpose of this rulemaking is to ensure that RACT is in place for all major VOC sources in the HGA ozone nonattainment area as required under federal law. The adoption of these rules ensure that these VOC sources can operate in compliance with federal law. Further, the rules are adopted to meet the air quality standards established under federal law as NAAQS.

The commission also believes that the adopted rules meet an additional exception to the requirements of Texas Government Code, Chapter 2007. First, Texas Government Code, §2007.003(b)(13), states that Chapter 2007 does not apply to an action that: 1) is taken in response to a real and substantial threat to public health and safety; 2) is designed to significantly advance the health and safety purpose; and 3) does not impose a greater burden than is necessary to achieve the health and safety purpose. Although the rule revisions do not directly prevent a nuisance or prevent an immediate threat to life or property, they do prevent a real and substantial

threat to public health and safety and significantly advance the health and safety purpose. This action is taken in response to the HGA area exceeding the federal ambient air quality standard for ground-level ozone, which adversely affects public health, primarily through irritation of the lungs. The action significantly advances the health and safety purpose by reducing ambient VOC and ozone levels in HGA. Consequently, these rules meet the exemption in §2007.003(b)(13).

The commission has included elsewhere in this preamble its reasoned justification for adopting this strategy and has explained why it is a necessary component of the SIP, which is federally mandated. This discussion, as well as the HGA SIP which is being adopted concurrently, explains in detail that every rule in the HGA SIP package is necessary and that none of the reductions in those packages represent more than is necessary to bring the area into attainment with the NAAQS. This rulemaking therefore meets the requirements of Texas Government Code, §2007.003(b)(4) and (13). For these reasons the rules do not constitute a takings under Chapter 2007 and do not require additional analysis.

BCCA, ExxonMobil, Phillips 66, REI, and TPIEC stated that the proposed rules did not include an adequate small business and micro-business assessment as required under Texas Government Code, §2006.002. The commenters stated that a an analysis of the costs of compliance for small and micro-businesses must also compare the costs of compliance for these businesses with the costs for the largest businesses affected by the rule. The commenters stated that the comparison must use at least one of the following standards: cost for each employee, cost for each hour of labor, or cost for each $100 of sales. The commenters asserted that the rule proposal failed to include the mandated cost comparison

standards. The commenters stated that this is the case even in those instances where the commission acknowledged a significant impact. The commenters stated that the commission either restated the costs of compliance it identified in the analysis of public benefits and costs, or concluded that it cannot determine the cost to small businesses. The commenters stated that the rule proposal preamble stated that "the estimated capital and annualized cost of installing and operating control technology used for the various types of equipment in fiscal note would appear to be a reasonable cost estimate for small and micro-businesses." (25 TexReg 8293).

The commenters asserted that the rule proposal's assessments fall short of what Texas law requires and that it is not sufficient for the agency merely to state that the costs for small and large businesses will be the same. The commenters stated that the rationale behind requiring a comparison using an established standard (e.g., cost for each employee, cost for each hour of labor, or cost for each $100 of sales) is to determine whether there is a disparate impact on small businesses. The commenters stated that according to *Unified Loans v. Pettijohn*, 955 S.W.2d at 652 (Court of Appeals -- Austin, 1997), the statute's purpose is to obtain "an objective assessment of the agency's proposed action by forcing it to consider seriously. . . the effect of the rule on small businesses, including an analysis of their costs of {compliance} and a comparison of their costs with the cost of compliance for the largest businesses affected. …" The commenters stated further that the commission cannot merely conclude that the costs to small businesses "cannot be determined," and is obliged to include in the notice "some basis" for its conclusion so that interested parties can "confront that basis in a meaningful way in their comments." (*Unified Loans v. Pettijohn*, 955 S.W.2d at 653.)

The commenters stated that in the rule proposal preamble, the commission did not publish the information mandated by Texas law and that as a result, it is impossible for the public to comment on whether the agency adequately considered the effect of the rule on small businesses, thus rendering the notice of the plan inadequate. The commenters stated that Texas Government Code, §2006.002, requires the commission to provide a comparison of the proposed rule's impact on small and large businesses, using the specified standards, for public review and comment before adoption.

The commission stated in the small business and micro-business assessment in proposal preamble that it was unable to identify any such businesses that would be affected by the proposed amendments. (See the August 25, 2000 issue of the *Texas Register* (25 TexReg 8259).) Since the commission was unable to identify any small or micro-businesses, it was not possible to provide an analysis based on the number of employees, hours of labor, or amount of sales income. Nevertheless, in order to provide a basis for comments on the potential impacts for small or micro-businesses, the commission estimated, to the extent possible, the costs based on the estimated annualized cost for installing and operating control technology in dollars per ton of VOC reduced that was used for various types of units in the fiscal note in the proposal preamble. Since the commission did not have access to the information contemplated by the statute, the use of an annualized cost was a meaningful way to provide sufficient notice of the cost to small and micro-businesses and therefore meets the objective of the Texas Government Code, Chapter 2006. Although the commission received several comments on the rules, none of the commenters identified themselves as small or micro-businesses.

Sierra-Houston resubmitted comment letters dated August 2, 1999, January 31, 2000, and February 24, 2000 concerning already-completed rulemakings and SIP revisions which Sierra-Houston had initially submitted during the comment period for these previous rulemakings and SIP revisions.

These comments were addressed in the ANALYSIS OF TESTIMONY section of the preambles to the earlier rulemakings and SIP revisions which were published in previous issues of the *Texas Register*.

Two individuals questioned whether bakeries produce a significant amount of controllable VOCs. One of the individuals also questioned whether offset lithographic printers produce a significant amount of controllable VOCs.

The adopted rules concerning VOC emissions from bakeries and offset printers in HGA apply only to major sources, which by definition are considered to be significant emission sources.

Montgomery Co. commented that the estimated emission reductions from VOC RACT rules for bakeries, batch processes, and offset lithographic printers were unknown.

No emission reductions are associated with the revisions to the existing Chapter 115 bakery rule since the emission reduction credit was taken in a previous SIP revision. As noted earlier in this preamble, deficiencies in the bakery rule as it applies in HGA must be corrected for the HGA Attainment Demonstration SIP to be approvable. Specifically, the EPA has specified that RACT

for bakery ovens is 80 - 90% control efficiency, while the commission rule as negotiated in 1994 requires only a 30% emission reduction. Consequently, adoption and implementation of an approvable Chapter 115 rule for bakeries in HGA is necessary, regardless of the magnitude of the associated emission reductions.

As noted earlier in this preamble, staff attempted to develop a demonstration of equivalency between the existing general vent gas rule and the batch processes ACT using the EPA's 5% rule. The EPA's "5% rule" provides a mechanism for states to justify exemptions or cutpoints which are more lenient than the EPA's RACT baseline. It is applied by determining the total emissions allowed by the EPA's RACT baseline (including exemptions) and comparing this to the emissions allowed (including exemptions) by a state regulation. If the difference is less than 5.0%, the EPA considers that there is no substantive difference between the EPA and state requirements. The staff was unable to assemble the information necessary to demonstrate to the EPA's satisfaction that existing rules represent RACT for batch processes in HGA because some of the necessary information is known only by the affected industry sources. Therefore, it is not possible at this time for the commission to estimate the emission reductions associated with the batch process rule. However, adoption and implementation of a Chapter 115 rule for batch processes in HGA is necessary, regardless of the magnitude of the associated emission reductions.

As noted earlier in this preamble, the Chapter 115 offset lithographic printing rule (§§115.440, 115.442, 115.443, 115.445, 115.446, and 115.449) is currently a contingency rule for HGA. Because HGA is a severe ozone nonattainment area, a source in HGA is major if it has the

potential to emit 25 tpy or more of VOC emissions. FCAA, 42 USC, §7511a(b)(2), requires that RACT be applied to major sources, and consequently it is necessary to implement this rule in HGA for sources with VOC emissions equal to or greater than 25 tpy. A previous retrieval from the EI did not reveal any major source offset printers in HGA. However, it has come to the commission's attention that there are approximately 20 offset printers in HGA that are major sources. Therefore, adoption and implementation of a Chapter 115 rule for offset printers in HGA is necessary, regardless of the magnitude of the associated emission reductions.

An individual suggested that the commission develop a rule to require inspection and monitoring of cooling towers, which the individual stated can emit significant quantities of VOC.

The commission agrees that cooling towers can emit significant quantities of VOC, and has begun preliminary research concerning such a possible rule.

Four individuals expressed concern about enforcement of the proposed rules, and one of these individuals recommended high penalties for noncompliance. One individual commented that the enforcement of the rules in Liberty County would be difficult because they would be hard pressed to justify allocating resources and manpower to enforce these types of rules when there are more serious problems in that area.

The commission agrees that adequate enforcement is critical to the success of the program. As with all of its rules, the commission will enforce the requirements after the compliance date and

take appropriate action for noncompliance situations. The commission will work with local officials to ensure enforcement of the SIP and SIP rules. The commission has existing relationships with pollution control authorities in the City of Houston, Harris County, and Galveston County for enforcement of other commission rules. The commission will continue enforcement relationships with these entities and develop relationships with other local officials as needed to create effective enforcement mechanisms for the SIP and SIP rules.

Missouri City questioned whether it would be required to enforce the proposed Chapter 115 revisions.

The rules are enforced by staff in the TNRCC's regional offices, as well as local air pollution control programs. Local governments have the same power and are subject to the same restrictions as the commission under TCAA, §382.015, Power to Enter Property, to inspect the air and to enter public or private property in its territorial jurisdiction to determine if the level of air contaminants in an area in its territorial jurisdiction meet levels set by the commission. Local governments are not required to enforce commission rules but may sign cooperative agreements with the commission to enforce the rules under TCAA, §382.115, Cooperative Agreements. Local programs can also enforce commission rules without signing a cooperative agreement. The authority of local governments to enforce air pollution requirements is specified in detail in TCAA, §§382.111 - 382.115, and local governments can institute civil actions in the same manner as the commission pursuant to Texas Water Code, §7.351.

No comments were received on §115.10, concerning Definitions. However, it has come to the commission's attention that a definition of "incinerator" is needed in §115.10 because the definition of this term in §101.1 specifically refers to devices used to combust solid or liquid materials. Because the term "incinerator," when used throughout Chapter 115, refers to control devices used to combust VOC vapors, the commission has added a definition of incinerator to §115.10 to clarify the distinction. The new definition is not a substantive change from how this term has always been used in Chapter 115, and its inclusion in the adopted rule will provide clarity. Subsequent definitions in §115.10 were renumbered due to the addition of the definition of incinerator.

Sierra-Houston stated that the vent gas rules of §§115.122 - 115.129; the batch process rules of §§115.161 - 115.169; the VOC transfer rules of §§115.211 - 115.216; the Stage II vapor recovery definitions of §115.240; the rotogravure and flexographic printing definitions of §115.430; and the offset printing rules of §115.449 should apply statewide so maximum reduction of precursors and their transboundary air pollution will occur. An individual stated that all requirements should apply statewide.

The commission appreciates the commenters' support for state-wide applicability of the adopted rules. The commission notes, however, that it is not obligated to adopt all rules statewide in order to satisfy its commitments under the SIP, nor is the commission required to do so under the FCAA. Three of the adopted measures contain emission reduction strategies that have been adopted with state-wide applicability: California Large-Spark Ignition Engines; Emissions

Banking and Trading Program (that portion of the adopted rule which relates to the trading of emission reduction credits and discrete emission reduction credits); and Cleaner Diesel Fuel (that portion of the adopted rule which relates to on-highway fuel).

In evaluating whether to implement all of the rules statewide, the commission took into account many concerns, including but not limited to, the need for the marketplace to be able to respond to regulation, the possible impacts on transport and distribution systems, the possibility of increased costs and financial burdens on regulated entities, and regional needs and issues associated with state-wide mandates. The commission analyzed where emission reduction measures are most needed and where emission reduction measures will be most effective in order to demonstrate attainment.

TPIEC stated that the vent gas rule was never intended to apply to pulp and paper sources, that the origins of the vent gas rule are not entirely clear, and that the vent gas rule should not apply to the pulp and paper industry. TPIEC stated that the requirement to control sources greater than 612 ppmv appears to have been based, in part, on EPA's CTG for surface coating of cans, coils, paper, fabrics, automobiles, and light duty trucks, while other parts of the rule may have been based on the CTG for synthetic organic chemical manufacturing industry (SOCMI) sources. TPIEC stated that the feasibility of this rule as applied to the pulp and paper industry was never considered by the commission when promulgating the rule, and that the commission has never counted any reduction from the application of the rule to the pulp and paper industry in any SIP demonstration. TPIEC stated that since pulp and

paper manufacturing is essentially a water-based operation which includes a large inorganic load in process and waste streams, the emissions of concentrated VOC are negligible.

The general vent gas rule was initially adopted in 1972 to control VOC emissions from various industrial process vents which, at the time, were generally uncontrolled. The rule originally contained an exemption limit of 30,000 ppmv, or 3.0% by volume, for all sources, because most vent gas streams containing this concentration level of VOCs will burn without the use of supplemental fuel. Consequently, the installation of a flare or thermal oxidizer was a highly cost-effective first step in controlling vent gas stream emissions.

In July 1985, the Texas Air Control Board (TACB, predecessor to the commission) lowered the exemption limit to 612 ppmv for all vent gas sources in Dallas and Tarrant Counties, with a compliance date of December 31, 1987. In May 1992, the TACB lowered the exemption limit to 612 ppmv for all vent gas sources in the other 14 ozone nonattainment counties, with a compliance date of July 31, 1994. The 612 ppmv limit was based on an EPA CTG limit for the control of VOCs in SOCMI vent gas sources. In November 1993, in response to an industry request, the commission extended the compliance date to May 31, 1995 for all sources. In May 1994, in response to a petition for rulemaking from TPIEC, the commission extended the compliance date for pulp and paper mills until November 15, 1998. At the time the extension was approved, the EPA was in the process of developing a multi-media pulp and paper Maximum Achievable Control Technology (MACT) standard with targeted promulgation and compliance dates of 1995 and 1998, respectively. Industry representatives were concerned that the installation of control

technology for compliance with the vent gas rule might soon be incompatible with control requirements specified by the forthcoming MACT standard. The commission agreed that controls installed for compliance with the vent gas rule might not be cost-effective if they had to be reworked in the near term. In April 1997, the commission again extended the exemption until November 15, 1999 because of the EPA delay in issuing the MACT. The MACT (40 CFR 63, Subpart S) was promulgated on December 28, 1998, and some control technology conflicts do exist. Both the vent gas rule and the MACT target some of the same processes for control, but with differing compliance deadlines. The industry then asked that the commission once again extend the vent gas rule's November 15, 1999 compliance date to avoid the need to control processes that will be shut down or otherwise controlled by the extension date. In October 1999, the commission again extended the compliance date until April 15, 2001 but noted that while it believed that the extension until April 15, 2001 was reasonable, the commission could not foresee a circumstance where an additional extension would be necessary or granted. Therefore, the commission believes that the vent gas rule should apply to the pulp and paper industry. The affected mills need to be in compliance with the rule by April 15, 2001 to forestall any enforcement action.

The EPA commented on the "once-in, always-in" (OIAI) requirement of §115.122(a)(4). The EPA stated that Chapter 106 has not been submitted as part of the SIP. The EPA commented that as a result, any vent gas stream for which a company elected to use the OIAI exemption (available under §115.122(a)(4)(A)) would still be subject to the vent gas rule from the federal enforcement perspective unless commission submitted the individual permit-by-rule as part of the SIP.

OIAI is an EPA concept which means that once emissions from a source exceed the applicability cutoff for a particular VOC regulation in the SIP, that source is always subject to the control requirements of the regulation. The purpose of this requirement is two-fold. First, it serves to discourage a source already subject to regulation from installing minimal controls to circumvent RACT requirements. Second, it improves the clarity of VOC regulations by minimizing the confusion over whether variations in production cause a particular source to be covered by a regulation. A major EPA concern which resulted in the OIAI requirements was their desire to prevent the removal of a control device, which would then result in a significant increase in emissions (i.e., a throughput reduction of 5.0% could result in an emissions increase of 90% if the control device were removed). To provide flexibility but prevent such emissions increases, the existing rule language includes an incentive for cost-effective and innovative approaches to pollution prevention and waste minimization which reduce emissions to no more than the controlled levels prior to removal of control devices. Also, it should be noted that in the event of revised rules which are less stringent than previous requirements (for example, revisions to the definition of VOC which exclude additional compounds from classification as VOC), the OIAI requirements will apply to the extent that emissions from a source exceed the applicability cutoff for the revised version of the rules. In the current rulemaking, the commission is simply revising §115.122(a)(4) to refer to "permit by rule" rather than "standard exemption" due to the requirements of SB 766, which amended the TCAA and created "permits by rule." Prior to passage of SB 766, the commission had the authority under TCAA, §382.057, to exempt from permitting requirements, changes within any facility and certain types of facilities that would not make a significant contribution of air contaminants to the atmosphere. In order to remove the

appearance that these insignificant facilities were exempt from environmental regulation in addition to being exempt from permitting, the new TCAA, §382.05196 gives the commission the authority to adopt permits by rule for certain types of facilities that will not make a significant contribution of air contaminants to the atmosphere. On August 9, 2000, the commission adopted revisions to 30 TAC Chapter 106 in order to use permits by rule to authorize new construction and/or modifications or changes (25 TexReg 8653 (September 1, 2000)). On August 13, 1982, (47 Federal Register 35183), the EPA published its approval of several revisions to 30 TAC Chapter 116 that were submitted to the EPA for SIP approval on May 9, 1975. Part of that May 9, 1975 submittal included §116.6, Exemptions. Although §116.6 has since been revised, the version that existed at the time of the August 13, 1982 SIP approval has not been withdrawn from the SIP. Thus, the basic regulatory authority for exemptions, now permits by rule, is in the SIP. In a letter dated June 4, 1990 from Merrit Nicewander, Chief, New Source Review Section, EPA Region VI, to Lawrence Pewitt, Director of the TACB Permits Division, the EPA stated that where the TACB issues standard exemptions pursuant to state regulations that were developed in accordance with the Texas SIP, the standard exemptions themselves are federally enforceable. Thus, since permits by rule are federally enforceable, companies may rely upon them in order to meet the exemption allowed by §115.122(a)(4).

The commission has updated the references in §115.122(a)(1)(A), (b)(1), and (c)(1)(A) and (2) from "Centigrade" to "Celsius" since this is now the term commonly used to describe this temperature scale. In addition, the commission revised §115.122(a)(3)(E) by changing a reference from "§101.29 of this title (relating to Emissions Credit Banking and Trading)" to "Chapter 101,

Subchapter H, Division 1 of this title (relating to Emission Credit Banking and Trading)" due to the repeal of §101.29 and its relocation to a new division within Chapter 101 in concurrent rulemaking published elsewhere in this issue of the *Texas Register*.

TCC stated that the commission did not provide a basis for extending the existing test methods and recordkeeping requirements in §115.126 to the attainment counties of Aransas, Bexar, Calhoun, Matagorda, San Patricio, and Travis; while Union Carbide commented that extending the test methods to Calhoun and the other named counties is not appropriate at this time. TCC and Union Carbide stated that monitoring and recordkeeping activities do not, in and of themselves, reduce emissions and suggested that these requirements be deleted for those counties. Union Carbide also stated that Title V permits might have to be updated and stated that compliance with the standards and exemptions could be accomplished as part of the Title V permitting process. Union Carbide requested that Calhoun and the other named counties not be included in the requirements of §115.125 and §115.126 and that the proposed changes only be reconsidered if there is a benefit to air quality in those areas or the ozone near-nonattainment areas.

In general, the purpose of §115.125 is simply to list the approved test methods to be used when testing is specifically required within this division (Vent Gas Control), when the executive director requests testing under §101.8 (Sampling), or when the owner or operator chooses to conduct testing of one or more vent gas streams. The changes to §115.125 do not add any requirements to Aransas, Bexar, Calhoun, Matagorda, Nueces, San Patricio, and Travis Counties, nor do the revisions to §115.126 add any requirements for the installation of monitors in these counties.

However, the revisions to §115.126 add recordkeeping requirements for exempt vent gas streams in Aransas, Bexar, Calhoun, Matagorda, San Patricio, and Travis Counties.

It should be noted that §115.126 historically has not included specific recordkeeping requirements for vent gas sources in these six counties. The commission believes that it is necessary for inspection and enforcement purposes to add recordkeeping requirements in these counties which are sufficient to document compliance with the exemptions. It is true that because Chapter 115 is an applicable requirement under Chapter 122, owners or operators subject to the Federal Operating Permit Program must, consistent with the revision process in Chapter 122, revise their operating permit to include the revised Chapter 115 requirements for each emission unit affected by the revisions to Chapter 115 at their site. However, inclusion of appropriate requirements in Chapter 115 could facilitate the issuance of operating permits by minimizing the "gaps" in the vent gas rule that must be addressed in these permits prior to their issuance.

The commission has revised §115.125(3)(C) and (D) to clarify that these subparagraphs specify requirements for flares in BPA, DFW, and HGA and for vapor combustors in Victoria County, BPA, DFW, ELP, and HGA which the owner or operator elected to consider as flares, and that these requirements do not apply in other counties.

TCC stated that some flares operate under a waiver from testing according to 40 CFR 60.18 because of safety or toxics concerns, and suggested the addition of language to §115.125(3)(B) and (C) to address such situations.

The commission agrees and has made the suggested change.

TCC stated that flares and vapor combustors with existing test data that meet the requirements of §115.125(3) should not have to conduct additional testing.

The commission agrees that existing test data that meets the testing requirements is sufficient for purposes of compliance.

TPIEC commented that a June 30, 2000 Rule Interpretation Memo (No. R5-112.008/R5-121.010) concluded that a determination of the applicability of the vent gas rule should be based on the primary function of a vessel at a given time, stating "if there is a fairly constant flow into and out of the vessel and the flow in roughly equals the flow out, the vessel should be considered a process vessel subject to the Vent Gas Control requirements…." TPIEC stated that this interpretation "will subject many pulp and paper vessels to the vent gas rule, even though the same materials when in storage are exempt from the VOC storage tank requirements and the only change is that they have now been diluted with water in a process tank."

This rule interpretation memo also states, "Please note, in the event that an external customer feels that this rule interpretation is in error or a source of information has been overlooked which would change the determination, a request for reconsideration may be submitted. Requests must be submitted on a Reconsideration Process Form which is available at the TNRCC's homepage: http://www.tnrcc.state.tx.us/air/opd/rimhmpg.htm or from any of the air rule interpretation team

members." Consequently, if TPIEC believes this memo to be in error, it may submit a request for reconsideration of the decision.

Union Carbide commented on §115.126(1) and (2), and questioned if these requirements apply to sources in Calhoun County.

Section 115.126(1), concerning continuous monitoring and recording of control device operating parameters, specifically applies to Victoria County and the 16 counties of the BPA, DFW, ELP, and HGA ozone nonattainment areas. It does not apply to Aransas, Bexar, Calhoun, Matagorda, Nueces, San Patricio, and Travis Counties. Section 115.126(2) applies to the 16 counties of the BPA, DFW, ELP, and HGA ozone nonattainment areas as well as Aransas, Bexar, Calhoun, Matagorda, Nueces, San Patricio, Travis, and Victoria Counties. However, §115.126(2) simply requires the owner or operator to maintain a record of the results of any testing conducted. The commission has made no change in response to the comment.

The commission notes that any reactor process or distillation operation vent gas stream with a flow rate less than 0.011 standard cubic meters per minute is exempt from the requirements of §115.121(a)(2)(A) under §115.127(a)(4)(C). It has come to the commission's attention that such vent gas streams which qualify for the flow rate exemption should only need records of the maximum design flow rate of the vent gas stream, rather than the records specified under §115.126(3)(A) - (C). Therefore, the commission has added a new §115.126(3)(D) which requires records of the maximum design flow rate of each vent gas stream claimed exempt under

§115.127(a)(4)(C). The commission also notes that any reactor process or distillation operation operating in a process unit with a total design capacity of less than 1,100 tpy, for all chemicals produced within that unit, is exempt from the requirements of §115.121(a)(2)(A) under §115.127(a)(4)(B). It has come to the commission's attention that such exempt process units should only need records of the total design capacity of the unit, rather than the records specified under §115.126(3)(A) - (C). Therefore, the commission has added a new §115.126(3)(E) which requires records of the total design capacity of process units exempt under §115.127(a)(4)(B). The new §115.126(3)(D) and (E) will relieve the owners or operators of these exempt vent gas streams and exempt process units from keeping unnecessary records.

TPIEC and Union Carbide commented on §115.126(3) and (4), concerning records for exempted vents. TPIEC and Union Carbide stated that it is not clear if engineering calculations can be used instead of testing in §115.126(3). TPIEC and Union Carbide recommended that §115.126(3) should be revised to make it clear that engineering calculations can be used instead of testing (i.e., similar to §115.126(4)). Union Carbide stated that the rule should be clear with respect to which sources must be tested to show that they meet the exemptions of §115.127. TPIEC expressed concern about the number of pulp and paper industry vents between 306 and 612 ppmv for which owners or operators would have to demonstrate daily compliance with the 612 ppmv exemption, and stated that the daily requirements of the vent gas rule are more burdensome than other Chapter 115 requirements.

The commission agrees that the recordkeeping requirements of §115.126(3) may be burdensome in some cases. To address the commenters' concerns, the commission revised §115.126(4) to allow

the owner or operator to use engineering calculations to determine if a vent gas stream is below the applicable exemption limits at maximum operating conditions, regardless of whether the vent gas stream is below 50% of the exemption level.

TPIEC also suggested that the word "and" between §115.126(3)(B) and (C) should be "or" to make it clear that the owner or operator is not expected to keep all three records, regardless of applicability.

To qualify a vent gas stream for exemption, the owner or operator only needs to document that the conditions of one of the exemptions are met. The commission has revised §115.126(3) by changing "limits" to "limit" and adding "the following, as appropriate." In addition, the commission revised §115.126(4) by adding the parenthetical phrase "either VOC concentration or mass emission rate." Finally, the commission revised §115.126(4) by changing "paragraph (3)" to "paragraph (3)(B) and (C)" to make it clear that the recordkeeping requirements of §115.126(4) are an alternative to the recordkeeping requirements of §115.126(3)(B) and (C).

TPIEC suggested that §115.127(a)(2)(C) be revised to make the 30,000 ppmv exemption permanent for the pulp and paper industry. As an alternative, TPIEC suggested the addition of language to §115.126(3) stating that "Alternate methods of demonstrating compliance with exemption criteria in this division (relating to Vent Gas Control) may be approved by the executive director."

As noted earlier, when taking action in October 1999 to extend the compliance deadline to April 15, 2001, the commission noted that it believed that the extension until April 15, 2001 was

reasonable but could not foresee a circumstance where an additional extension would be necessary or granted. There have been no developments since October 1999 that would change the commission's position. Therefore, the commission believes that the vent gas rule should apply to the pulp and paper industry and expects the affected mills to be in compliance with the rule by April 15, 2001. Regarding the commenter's suggested new rule language, it should be noted that §115.123 already specifies that alternate methods of demonstrating and documenting continuous compliance with the applicable control requirements or exemption criteria may be approved by the executive director in accordance with §115.910 of this title (relating to Availability of Alternate Means of Control) if emission reductions are demonstrated to be substantially equivalent. Therefore, the commission has made no change in response to the comment.

Union Carbide commented on §115.129 and suggested that an April 30, 2005 compliance date be specified for any new recordkeeping and testing requirements.

The commission agrees that a compliance date should be specified for the recordkeeping requirements of §115.126(3) and (4) which will apply to exempt vent gas streams in Aransas, Bexar, Calhoun, Matagorda, San Patricio, and Travis Counties and has added a new §115.129(g). However, the commission believes that a December 31, 2001 compliance date is sufficient for owners or operators to develop adequate documentation of the exemption status of their vent gas streams.

No changes were proposed to §115.162(3) and §115.212(a)(7). However, it has come to the commission's attention that the references to "standard exemption" need to be updated to "permit by rule" due to the requirements of SB 766, which amended the TCAA and created "permits by rule." The commission has updated §115.162(3) and §115.212(a)(7) accordingly. These changes do not impose additional requirements but merely reflect changes in terminology and in the title of Chapter 106.

GEHC suggested that the Stage II vapor recovery rules of §§115.240 - 115.249 should apply to all gas stations. Another individual generally supported use of vapor recovery systems at gas stations.

The commission cannot revise these rules upon adoption to apply to additional gas stations in this rulemaking because the newly affected parties for which these rules do not currently apply would not have had adequate notice and opportunity to comment. Under the TCAA, Stage II vapor recovery systems are statutorily limited to use in ozone nonattainment areas. Consequently, the commission has made no change in response to the comment.

GEHC and an individual stated that most gas stations with which they are familiar do not have Stage II gas dispensing nozzles.

With very few exceptions, gas stations in ozone nonattainment counties have been required to have Stage II equipment for anywhere from two to eight years. The vast majority of these gas stations have installed vacuum-assist Stage II systems, which have nozzles that appear the same as non-

Stage II nozzles at first glance. Therefore, it is likely that the gas stations that the commenters believe are not equipped with Stage II are, in fact, so equipped.

PIGC suggested a variety of changes to §§115.440, 115.442, and 115.446 which PIGC believes could provide additional flexibility to offset printing operations that are subject to the offset printing requirements of §§115.440, 115.442, 115.443, 115.445, 115.446, and 115.449.

Because only §115.449 was proposed for change, the commission is prohibited by the Administrative Procedures Act from revising any other sections in the Chapter 115 offset printing rules as part of the current rulemaking. However, some of the PIGC's suggestions, such as the "low VOC composite vapor pressure" option that PIGC would like added to §115.442(1)(F), could be handled case-by-case under the alternative control requirement option presently available under §115.443. The commission has made no change in response to the comment.

STATUTORY AUTHORITY

The amendment is adopted under the Texas Health and Safety Code, TCAA, §382.011, concerning General Powers and Duties, which provides the commission with the authority to establish the level of quality to be maintained in the state's air and the authority to control the quality of the state's air; §382.017, concerning Rules, which provides the commission with the authority to adopt rules consistent with the policy and purposes of the TCAA; and §382.012, concerning State Air Control Plan, which requires the commission to develop plans for protection of the state’s air, such as the SIP.

SUBCHAPTER A: DEFINITIONS

§115.10

§115.10. Definitions.

Unless specifically defined in the Texas Clean Air Act (TCAA) or in the rules of the Texas Natural Resource Conservation Commission (commission), the terms used by the commission have the meanings commonly ascribed to them in the field of air pollution control. In addition to the terms which are defined by the TCAA, the following terms, when used in this chapter, shall have the following meanings, unless the context clearly indicates otherwise. Additional definitions for terms used in this chapter are found in §101.1 of this title (relating to Definitions) and §3.2 of this title (relating to Definitions).

(1) **Beaumont/Port Arthur area** - Hardin, Jefferson, and Orange Counties.

(2) **Capture efficiency** - The amount of volatile organic compounds (VOC) collected by a capture system which is expressed as a percentage derived from the weight per unit time of VOC entering a capture system and delivered to a control device divided by the weight per unit time of total VOC generated by a source of VOC.

(3) **Carbon adsorption system** - A carbon adsorber with an inlet and outlet for exhaust gases and a system to regenerate the saturated adsorbent.

(4) **Component** - A piece of equipment, including, but not limited to pumps, valves, compressors, and pressure relief valves, which has the potential to leak VOC.

(5) **Continuous monitoring** - Any monitoring device used to comply with a continuous monitoring requirement of this chapter will be considered continuous if it can be demonstrated that at least 95% of the required data is captured.

(6) **Covered attainment counties** - Anderson, Angelina, Aransas, Atascosa, Austin, Bastrop, Bee, Bell, Bexar, Bosque, Bowie, Brazos, Burleson, Caldwell, Calhoun, Camp, Cass, Cherokee, Colorado, Comal, Cooke, Coryell, De Witt, Delta, Ellis, Falls, Fannin, Fayette, Franklin, Freestone, Goliad, Gonzales, Grayson, Gregg, Grimes, Guadalupe, Harrison, Hays, Henderson, Hill, Hood, Hopkins, Houston, Hunt, Jackson, Jasper, Johnson, Karnes, Kaufman, Lamar, Lavaca, Lee, Leon, Limestone, Live Oak, Madison, Marion, Matagorda, McLennan, Milam, Morris, Nacogdoches, Navarro, Newton, Nueces, Panola, Parker, Polk, Rains, Red River, Refugio, Robertson, Rockwall, Rusk, Sabine, San Jacinto, San Patricio, San Augustine, Shelby, Smith, Somervell, Titus, Travis, Trinity, Tyler, Upshur, Van Zandt, Victoria, Walker, Washington, Wharton, Williamson, Wilson, Wise, and Wood Counties.

(7) **Dallas/Fort Worth area** - Collin, Dallas, Denton, and Tarrant Counties.

(8) **El Paso area** - El Paso County.

(9) **External floating roof** - A cover or roof in an open-top tank which rests upon or is floated upon the liquid being contained and is equipped with a single or double seal to close the space between the roof edge and tank shell. A double seal consists of two complete and separate closure seals, one above the other, containing an enclosed space between them. For the purposes of this chapter (relating to Control of Air Pollution from Volatile Organic Compounds), an external floating roof storage tank which is equipped with a self-supporting fixed roof (typically a bolted aluminum geodesic dome) shall be considered to be an internal floating roof storage tank.

(10) **Fugitive emission** - Any VOC entering the atmosphere which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening designed to direct or control its flow.

(11) **Gasoline bulk plant -** A gasoline loading and/or unloading facility, excluding marine terminals, having a gasoline throughput less than 20,000 gallons (75,708 liters) per day, averaged over each consecutive 30-day period. A motor vehicle fuel dispensing facility is not a gasoline bulk plant.

(12) **Gasoline terminal -** A gasoline loading and/or unloading facility, excluding marine terminals, having a gasoline throughput equal to or greater than 20,000 gallons (75,708 liters) per day, averaged over each consecutive 30-day period.

(13) **Houston/Galveston area** - Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties.

(14) **Incinerator** - For the purposes of this chapter (relating to Control of Air Pollution from Volatile Organic Compounds), an enclosed control device that combusts or oxidizes VOC gases or vapors.

(15) **Internal floating cover -** A cover or floating roof in a fixed roof tank which rests upon or is floated upon the liquid being contained, and is equipped with a closure seal or seals to close the space between the cover edge and tank shell. For the purposes of this chapter (relating to Control of Air Pollution from Volatile Organic Compounds), an external floating roof storage tank which is equipped with a self-supporting fixed roof (typically a bolted aluminum geodesic dome) shall be considered to be an internal floating roof storage tank.

(16) **Liquefied petroleum gas** - Any material that is composed predominantly of any of the following hydrocarbons or mixtures of hydrocarbons: propane, propylene, normal butane, isobutane, and butylenes.

(17) **Leak-free marine vessel** - A marine vessel whose cargo tank closures (hatch covers, expansion domes, ullage openings, butterworth covers, and gauging covers) were inspected prior to cargo transfer operations and all such closures were properly secured such that no leaks of liquid or vapors can be detected by sight, sound, or smell. Cargo tank closures shall meet the

applicable rules or regulations of the marine vessel's classification society or flag state. Cargo tank pressure/vacuum valves shall be operating within the range specified by the marine vessel's classification society or flag state and seated when tank pressure is less than 80% of set point pressure such that no vapor leaks can be detected by sight, sound, or smell. As an alternative, a marine vessel operated at negative pressure is assumed to be leak-free for the purpose of this standard.

(18) **Marine loading facility** - The loading arm(s), pumps, meters, shutoff valves, relief valves, and other piping and valves that are part of a single system used to fill a marine vessel at a single geographic site. Loading equipment that is physically separate (i.e., does not share common piping, valves, and other loading equipment) is considered to be a separate marine loading facility.

(19) **Marine loading operation** - The transfer of oil, gasoline, or other volatile organic liquids at any affected marine terminal, beginning with the connections made to a marine vessel and ending with the disconnection from the marine vessel.

(20) **Marine terminal** - Any marine facility or structure constructed to load oil, gasoline, or other volatile organic liquid bulk cargo into a marine vessel. A marine terminal consists of one or more marine loading facilities.

(21) **Natural gas/gasoline processing** - A process that extracts condensate from gases obtained from natural gas production and/or fractionates natural gas liquids into component products, such as ethane, propane, butane, and natural gasoline. The following facilities shall be included in this

definition if, and only if, located on the same property as a natural gas/gasoline processing operation previously defined: compressor stations, dehydration units, sweetening units, field treatment, underground storage, liquified natural gas units, and field gas gathering systems.

(22) **Petroleum refinery** - Any facility engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants, or other products through distillation of crude oil, or through the redistillation, cracking, extraction, reforming, or other processing of unfinished petroleum derivatives.

(23) **Polymer or resin manufacturing process** - A process that produces any of the following polymers or resins: polyethylene, polypropylene, polystyrene, and styrenebutadiene latex.

(24) **Printing line** - An operation consisting of a series of one or more printing processes and including associated drying areas.

(25) **Synthetic organic chemical manufacturing process** - A process that produces, as intermediates or final products, one or more of the chemicals listed in 40 Code of Federal Regulations 60.489 (effective October 18, 1983).

(26) **Tank-truck tank** - Any storage tank having a capacity greater than 1,000 gallons, mounted on a tank-truck or trailer. Vacuum trucks used exclusively for maintenance and spill response are not considered to be tank-truck tanks.

(27) **Transport vessel** - Any land-based mode of transportation (truck or rail) that is equipped with a storage tank having a capacity greater than 1,000 gallons which is used to transport oil, gasoline, or other volatile organic liquid bulk cargo. Vacuum trucks used exclusively for maintenance and spill response are not considered to be transport vessels.

(28) **True partial pressure** - The absolute aggregate partial pressure (psia) of all VOC in a gas stream.

(29) **Vapor balance system** - A system which provides for containment of hydrocarbon vapors by returning displaced vapors from the receiving vessel back to the originating vessel.

(30) **Vapor control system or vapor recovery system** - Any control system which utilizes vapor collection equipment to route VOC to a control device that reduces VOC emissions.

(31) **Vapor-tight** - Not capable of allowing the passage of gases at the pressures encountered except where other acceptable leak-tight conditions are prescribed in this chapter.

(32) **Waxy, high pour point crude oil** - A crude oil with a pour point of 50 degrees Fahrenheit (10 degrees Celsius) or higher as determined by the American Society for Testing and Materials Standard D97-66, "Test for Pour Point of Petroleum Oils."

SUBCHAPTER B: GENERAL VOLATILE ORGANIC COMPOUND SOURCES

DIVISION 2: VENT GAS CONTROL

§§115.120, 115.122, 115.125 - 115.127, 115.129

STATUTORY AUTHORITY

The new section and amendments are adopted under the Texas Health and Safety Code, Texas Clean Air Act (TCAA), §382.011, concerning General Powers and Duties, which provides the commission with the authority to establish the level of quality to be maintained in the state's air and the authority to control the quality of the state's air; §382.017, concerning Rules, which provides the commission with the authority to adopt rules consistent with the policy and purposes of the TCAA; and §382.012, concerning State Air Control Plan, which requires the commission to develop plans for protection of the state’s air, such as the SIP.

§115.120. Vent Gas Definitions.

The following words and terms, when used in this division, shall have the following meanings, unless the context clearly indicates otherwise. Additional definitions for terms used in this division are found in §115.10 of this title (relating to Definitions), §101.1 of this title (relating to Definitions), and §3.2 of this title (relating to Definitions).

(1) **Bakery oven** - An oven for baking bread or any other yeast-leavened products.

(2) **Synthetic Organic Chemical Manufacturing Industry (SOCMI) batch distillation operation** - A SOCMI noncontinuous distillation operation in which a discrete quantity or batch of liquid feed is charged into a distillation unit and distilled at one time. After the initial charging of the liquid feed, no additional liquid is added during the distillation operation.

(3) **Synthetic Organic Chemical Manufacturing Industry (SOCMI) batch process** - Any SOCMI noncontinuous reactor process which is not characterized by steady-state conditions, and in which reactants are not added and products are not removed simultaneously.

(4) **Synthetic Organic Chemical Manufacturing Industry (SOCMI) distillation operation** - A SOCMI operation separating one or more feed stream(s) into two or more exit streams, each exit stream having component concentrations different from those in the feed stream(s). The separation is achieved by the redistribution of the components between the liquid and vapor-phase as they approach equilibrium within the distillation unit.

(5) **Synthetic Organic Chemical Manufacturing Industry (SOCMI) distillation unit** - A SOCMI device or vessel in which distillation operations occur, including all associated internals (including, but not limited to, trays and packing), accessories (including, but not limited to, reboilers, condensers, vacuum pumps, and steam jets), and recovery devices (such as absorbers, carbon adsorbers, and condensers) which are capable of, and used for, recovering chemicals for use, reuse, or sale.

(6) **Synthetic Organic Chemical Manufacturing Industry (SOCMI) reactor process** - A SOCMI unit operation in which one or more chemicals, or reactants other than air, are combined or decomposed in such a way that their molecular structures are altered and one or more new organic compounds are formed.

§115.122. Control Requirements.

(a) For all persons in the Beaumont/Port Arthur, Dallas/Fort Worth, El Paso, and Houston/ Galveston areas, the following control requirements shall apply:

(1) Any vent gas streams affected by §115.121(a)(1) of this title (relating to Emission Specifications) must be controlled properly with a control efficiency of at least 90% or to a volatile organic compound (VOC) concentration of no more than 20 parts per million by volume (ppmv) (on a dry basis corrected to 3.0% oxygen for combustion devices):

(A) in a direct-flame incinerator at a temperature equal to or greater than 1,300 degrees Fahrenheit (704 degrees Celsius);

(B) in a smokeless flare; or

(C) by any other vapor control system, as defined in §115.10 of this title (relating to Definitions).

(2) Any vent gas streams affected by §115.121(a)(2) of this title must be controlled properly with a control efficiency of at least 98% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices):

(A) in a smokeless flare; or

(B) by any other vapor control system, as defined in §115.10 of this title.

(3) For the Dallas/Fort Worth, El Paso, and Houston/Galveston areas, VOC emissions from each bakery with a bakery oven vent gas stream(s) affected by §115.121(a)(3) of this title shall be reduced as follows.

(A) Each bakery in the Houston/Galveston area with a total weight of VOC emitted from all bakery ovens on the property, when uncontrolled, equal to or greater than 25 tons per calendar year shall ensure that the overall emission reduction from the uncontrolled VOC emission rate of the oven(s) will be at least 80% by December 31, 2001.

(B) Each bakery in the Dallas/Fort Worth area with a total weight of VOC emitted from all bakery ovens on the property, when uncontrolled, equal to or greater than 50 tons per calendar year, shall ensure that the overall emission reduction from the uncontrolled VOC emission rate of the oven(s) will be at least 80% by December 31, 2000.

(C) Each bakery in the Dallas/Fort Worth area with a total weight of VOC emitted from all bakery ovens on the property, when uncontrolled, equal to or greater than 25 tons per calendar year, but less than 50 tons per calendar year, shall reduce total VOC emissions by at least 30% from the bakery's 1990 emissions inventory in accordance with the schedule specified in §115.129(d) of this title (relating to Counties and Compliance Schedules).

(D) Each bakery in the El Paso area with a total weight of VOC emitted from all bakery ovens on the property, when uncontrolled, equal to or greater than 25 tons per calendar year shall reduce total VOC emissions by at least 30% from the bakery's 1990 emissions inventory in accordance with the schedule specified in §115.129(e) of this title.

(E) Emission reductions in the 30% to 90% range are not creditable under Chapter 101, Subchapter H, Division 1 of this title (relating to Emission Credit Banking and Trading) for the following bakeries:

(i) each bakery in the Houston/Galveston area with a total weight of VOC emitted from all bakery ovens on the property, when uncontrolled, equal to or greater than 25 tons per calendar year;

(ii) each bakery in the Dallas/Fort Worth area with a total weight of VOC emitted from all bakery ovens on the property, when uncontrolled, equal to or greater than 50 tons per calendar year;

(iii) each bakery in the El Paso area with a total weight of VOC emitted from all bakery ovens on the property, when uncontrolled, equal to or greater than 50 tons per calendar year.

(4) Any vent gas stream that becomes subject to the provisions of paragraphs (1), (2), or (3) of this subsection by exceeding provisions of §115.127(a) of this title (relating to Exemptions) shall remain subject to the provisions of this subsection, even if throughput or emissions later fall below the exemption limits unless and until emissions are reduced to no more than the controlled emissions level existing before implementation of the project by which throughput or emission rate was reduced to less than the applicable exemption limits in §115.127(a) of this title; and:

(A) the project by which throughput or emission rate was reduced is authorized by any permit or permit amendment or standard permit or permit by rule required by Chapter 116 or Chapter 106 of this title (relating to Control of Air Pollution by Permits for New Construction or Modification; and Permits by Rule). If a permit by rule is available for the project, compliance with this subsection must be maintained for 30 days after the filing of documentation of compliance with that permit by rule; or

(B) if authorization by permit, permit amendment, standard permit, or permit by rule is not required for the project, the owner or operator has given the executive director 30 days' notice of the project in writing.

(b) For all persons in Nueces and Victoria Counties, any vent gas streams affected by §115.121(b) of this title must be controlled properly with a control efficiency of at least 90% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices):

(1) in a direct-flame incinerator at a temperature equal to or greater than 1,300 degrees Fahrenheit (704 degrees Celsius);

(2) in a smokeless flare; or

(3) by any other vapor control system, as defined in §115.10 of this title.

(c) For all persons in Aransas, Bexar, Calhoun, Matagorda, San Patricio, and Travis Counties, the following control requirements shall apply.

(1) Any vent gas streams affected by §115.121(c)(1) of this title must be controlled properly:

(A) in a direct-flame incinerator at a temperature equal to or greater than 1,300 degrees Fahrenheit (704 degrees Celsius);

(B) in a smokeless flare; or

(C) by any other vapor control system, as defined in §115.10 of this title, with a control efficiency of at least 90% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices).

(2) Any vent gas streams affected by §115.121(c)(2) of this title must be controlled properly:

(A) in a direct-flame incinerator or boiler at a temperature equal to or greater than 1,300 degrees Fahrenheit (704 degrees Celsius); or

(B) by any other vapor control system, as defined in §115.10 of this title, with a control efficiency of at least 90% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices).

(3) Any vent gas streams affected by §115.121(c)(3) of this title must be controlled properly:

(A) at a temperature equal to or greater than 1,300 degrees Fahrenheit (704 degrees Celsius) in an afterburner having a retention time of at least one-fourth of a second, and having a steady flame that is not affected by the cupola charge and relights automatically if extinguished; or

(B) by any other vapor control system, as defined in §115.10 of this title, with a control efficiency of at least 90% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices).

(4) Any vent gas streams affected by §115.121(c)(4) of this title must be controlled properly:

(A) in a smokeless flare or in a combustion device used in a heating process associated with the operation of a blast furnace; or

(B) by any other vapor control system, as defined in §115.10 of this title, with a control efficiency of at least 90% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices).

§115.125. Testing Requirements.

Compliance with the emission specifications, vapor control system efficiency, and certain control requirements and exemption criteria of §§115.121 - 115.123 and 115.127 of this title (relating to Emission Specifications; Control Requirements; Alternate Control Requirements; and Exemptions) shall be determined by applying one or more of the following test methods and procedures, as appropriate, when specifically required within this division (relating to Vent Gas Control), when

required by the executive director under §101.8 of this title (relating to Sampling), or when the owner or operator elects to conduct testing of one or more vent gas streams.

(1) Flow rate. Test Methods 1-4 (40 Code of Federal Regulations (CFR) 60, Appendix A) are used for determining flow rates, as necessary.

(2) Concentration of volatile organic compounds (VOC).

(A) Test Method 18 (40 CFR 60, Appendix A) is used for determining gaseous organic compound emissions by gas chromatography.

(B) Test Method 25 (40 CFR 60, Appendix A) is used for determining total gaseous nonmethane organic emissions as carbon.

(C) Test Methods 25A or 25B (40 CFR 60, Appendix A) are used for determining total gaseous organic concentrations using flame ionization or nondispersive infrared analysis.

(3) Performance requirements for flares and vapor combustors.

(A) For flares, Test Method 22 (40 CFR 60, Appendix A) is used for visual determination of fugitive emissions from material sources and smoke emissions.

(B) For flares, additional test method requirements are described in 40 CFR 60.18(f), unless EPA or the executive director has granted a waiver from such testing requirements.

(C) Flares in the Beaumont/Port Arthur, Dallas/Fort Worth, and Houston/Galveston areas shall comply with the performance test requirements of 40 CFR 60.18(b), unless EPA or the executive director has granted a waiver from such testing requirements.

(D) For vapor combustors, the owner or operator may consider the unit to be a flare. Each vapor combustor in Victoria County and the Beaumont/Port Arthur, Dallas/Fort Worth, El Paso, and Houston/Galveston areas which the owner or operator elected to consider as a flare shall meet the performance test requirements of 40 CFR 60.18(b) in lieu of any testing under paragraphs (1) and (2) of this section.

(E) Compliance with the requirements of 40 CFR 60.18(b) will be considered to demonstrate compliance with the emission specifications and control efficiency requirements of §115.121 and §115.122 of this title.

(4) Minor modifications. Minor modifications to these test methods may be used, if approved by the executive director.

(5) Alternate test methods. Test methods other than those specified in paragraphs (1) - (3) of this section may be used if validated by 40 CFR 63, Appendix A, Test Method 301 (effective

December 29, 1992). For the purposes of this paragraph, substitute "executive director" each place that Test Method 301 references "administrator."

§115.126. Monitoring and Recordkeeping Requirements.

The owner or operator of any facility which emits volatile organic compounds (VOC) through a stationary vent in Aransas, Bexar, Calhoun, Matagorda, Nueces, San Patricio, Travis, and Victoria Counties or in the Beaumont/Port Arthur, Dallas/Fort Worth, El Paso, and Houston/Galveston areas shall maintain the following information at the facility for at least two years. The owner or operator shall make the information available upon request to representatives of the executive director, EPA, or any local air pollution control agency having jurisdiction in the area.

(1) Vapor control systems. For vapor control systems used to control emissions in Victoria County and in the Beaumont/Port Arthur, Dallas/Fort Worth, El Paso, and Houston/Galveston areas from vents subject to the provisions of §115.121 of this title (relating to Emission Specifications), records of appropriate parameters to demonstrate compliance, including:

(A) continuous monitoring and recording of:

(i) the exhaust gas temperature immediately downstream of a direct-flame incinerator;

(ii) the inlet and outlet gas temperatures of a catalytic incinerator or chiller;

(iii) the exhaust gas VOC concentration of any carbon adsorption system, as defined in §101.1 of this title (relating to Definitions); and

(iv) the exhaust gas temperature immediately downstream of a vapor combustor. Alternatively, the owner or operator of a vapor combustor may consider the unit to be a flare and meet the requirements specified in 40 Code of Federal Regulations (CFR) 60.18(b) and Chapter 111 of this title (relating to Control of Air Pollution from Visible Emissions and Particulate Matter) for flares;

(B) in the Beaumont/Port Arthur, Dallas/Fort Worth, and Houston/Galveston areas, the requirements specified in 40 CFR 60.18(b) and Chapter 111 of this title for flares; and

(C) for vapor control systems other than those specified in subparagraphs (A) and (B) of this paragraph, records of appropriate operating parameters.

(2) Test results. A record of the results of any testing conducted in accordance with §115.125 of this title (relating to Testing Requirements).

(3) Records for exempted vents. Records for each vent exempted from control requirements in accordance with §115.127 of this title (relating to Exemptions) shall be sufficient to demonstrate compliance with the applicable exemption limit, including the following, as appropriate:

(A) the pounds of ethylene emitted per 1,000 pounds of low-density polyethylene produced;

(B) the combined weight of VOC of each vent gas stream on a daily basis;

(C) the concentration of VOC in each vent gas stream on a daily basis;

(D) the maximum design flow rate or VOC concentration of each vent gas stream exempt under §115.127(a)(4)(C) of this title; and

(E) the total design capacity of process units exempt under §115.127(a)(4)(B) of this title.

(4) Alternative records for exempted vents. As an alternative to the requirements of paragraph (3)(B) and (C) of this section, records for each vent exempted from control requirements in accordance with §115.127 of this title and having a VOC emission rate or concentration less than the applicable exemption limits at maximum actual operating conditions shall be sufficient to demonstrate continuous compliance with the applicable exemption limit. These records shall include complete

information from either test results or appropriate calculations which clearly documents that the emission characteristics at maximum actual operating conditions are less than the applicable exemption limit. This documentation shall include the operating parameter levels that occurred during any testing, and the maximum levels feasible (either VOC concentration or mass emission rate) for the process.

(5) Bakeries. For bakeries subject to §115.122(a)(3)(A) - (B) of this title (relating to Control Requirements), the following additional requirements apply.

(A) The owner or operator of each bakery in the Houston/Galveston area with a total weight of VOC emitted from all bakery ovens on the property, when uncontrolled, equal to or greater than 25 tons per calendar year, shall submit a control plan no later than March 31, 2001, to the executive director, the appropriate regional office, and any local air pollution control program with jurisdiction. The plan shall demonstrate that the overall emission reduction from the uncontrolled VOC emission rate of the oven(s) will be at least 80% by December 31, 2001. At a minimum, the control plan shall include the emission point number (EPN) and the facility identification number (FIN) of each bakery oven and any associated control device, a plot plan showing the location, EPN, and FIN of each bakery oven and any associated control device, and the 2000 VOC emission rates (consistent with the bakery's 2000 emissions inventory). The projected 2002 VOC emission rates shall be calculated in a manner consistent with the 2000 emissions inventory.

(B) All representations in control plans become enforceable conditions. It shall be unlawful for any person to vary from such representations if the variation will cause a change in the

identity of the specific emission sources being controlled or the method of control of emissions unless the owner or operator of the bakery submits a revised control plan to the executive director, the appropriate regional office, and any local air pollution control program with jurisdiction within 30 days of the change. All control plans shall include documentation that the overall emission reduction from the uncontrolled VOC emission rate of the bakery's oven(s) continues to be at least the specified percentage reduction. The emission rates shall be calculated in a manner consistent with the most recent emissions inventory.

(6) Bakeries (contingency measures). For bakeries subject to §115.122(a)(3)(C) and (D) of this title, the following additional requirements apply.

(A) No later than six months after the commission publishes notification in the *Texas Register* as specified in §115.129(d) or (e) of this title (relating to Counties and Compliance Schedules), the owner or operator of each bakery shall submit an initial control plan to the executive director, the appropriate regional office, and any local air pollution control program with jurisdiction which demonstrates that the overall reduction of VOC emissions from the bakery's 1990 emissions inventory will be at least 30%. At a minimum, the control plan shall include the EPN and the FIN of each bakery oven and any associated control device, a plot plan showing the location, EPN, and FIN of each bakery oven and any associated control device, and the 1990 VOC emission rates (consistent with the bakery's 1990 emissions inventory). The projected VOC emission rates shall be calculated in a manner consistent with the 1990 emissions inventory.

(B) In order to document continued compliance with §115.122(a)(3) of this title, the owner or operator of each bakery shall submit an annual report no later than March 31 of each year to the executive director, the appropriate regional office, and any local air pollution control program with jurisdiction which demonstrates that the overall reduction of VOC emissions from the bakery's 1990 emissions inventory during the preceding calendar year is at least 30%. At a minimum, the report shall include the EPN and FIN of each bakery oven and any associated control device, a plot plan showing the location, EPN, and FIN of each bakery oven and any associated control device, and the VOC emission rates. The emission rates for the proceeding calendar year shall be calculated in a manner consistent with the 1990 emissions inventory.

(C) All representations in control plans and annual reports become enforceable conditions. It shall be unlawful for any person to vary from such representations if the variation will cause a change in the identity of the specific emission sources being controlled or the method of control of emissions unless the owner or operator of the bakery submits a revised control plan to the executive director, the appropriate regional office, and any local air pollution control program with jurisdiction within 30 days of the change. All control plans and reports shall include documentation that the overall reduction of VOC emissions from the bakery's 1990 emissions inventory continues to be at least 30%. The emission rates shall be calculated in a manner consistent with the 1990 emissions inventory.

(7) Additional flare requirements. The owner or operator of a facility that uses a flare to meet the requirements of §115.122(a)(2) of this title shall install, calibrate, maintain, and operate

according to the manufacturer's specifications, a heat-sensing device, such as an ultraviolet beam sensor or thermocouple, at the pilot light to indicate continuous presence of a flame.

§115.127. Exemptions.

(a) For all persons in the Beaumont/Port Arthur, Dallas/Fort Worth, El Paso, and Houston/ Galveston areas, the following exemptions apply.

(1) A vent gas stream from a low-density polyethylene plant is exempt from the requirements of §115.121(a)(1) of this title (relating to Emission Specifications) if no more than 1.1 pounds of ethylene per 1,000 pounds (1.1 kg/1,000 kg) of product are emitted from all the vent gas streams associated with the formation, handling, and storage of solidified product.

(2) The following vent gas streams are exempt from the requirements of §115.121(a)(1) of this title:

(A) a vent gas stream having a combined weight of volatile organic compounds (VOC) equal to or less than 100 pounds (45.4 kg) in any continuous 24-hour period;

(B) a vent gas stream specified in §115.121(a)(1) of this title with a concentration of VOC less than 612 parts per million by volume (ppmv);

(C) until April 15, 2001, for facilities which have been assigned the code number 26 as described in the document Standard Industrial Classification (SIC) Manual, 1972, as amended by the 1977 Supplement, a vent gas stream specified in §115.121(a)(1) of this title with a concentration of VOC less than 30,000 ppmv;

(D) a vent gas stream which is subject to §115.121(a)(2) or (3) of this title; and

(E) a vent gas stream which qualifies for exemption under paragraphs (3), (4)(B), (4)(C), (4)(D), (4)(E), or (5) of this subsection.

(3) The following vent gas streams are exempt from the requirements of §115.121(a)(2)(B) - (E) of this title:

(A) a vent gas stream having a combined weight of VOC equal to or less than 100 pounds (45.4 kilograms) in any continuous 24-hour period;

(B) a vent gas stream from any air oxidation synthetic organic chemical manufacturing process with a concentration of VOC less than 612 ppmv; and

(C) a vent gas stream from any liquid phase polypropylene manufacturing process, any liquid phase slurry high-density polyethylene manufacturing process, and any continuous polystyrene manufacturing process with a concentration of VOC less than 408 ppmv.

(4) For synthetic organic chemical manufacturing industry (SOCMI) reactor processes and distillation operations:

(A) Any reactor process or distillation operation that is designed and operated in a batch mode is exempt from the requirements of §115.121(a)(2)(A) of this title. For the purposes of this subparagraph, batch mode means any noncontinuous reactor process or distillation operation which is not characterized by steady-state conditions, and in which the addition of reactants does not occur simultaneously with the removal of products.

(B) Any reactor process or distillation operation operating in a process unit with a total design capacity of less than 1,100 tons per year, for all chemicals produced within that unit, is exempt from the requirements of §115.121(a)(2)(A) of this title.

(C) Any reactor process or distillation operation vent gas stream with a flow rate less than 0.011 standard cubic meters per minute or a VOC concentration less than 500 ppmv is exempt from the requirements of §115.121(a)(2)(A) of this title.

(D) Any distillation operation vent gas stream which meets the requirements of 40 Code of Federal Regulations (CFR) 60.660(c)(4) or 60.662(c) (concerning Subpart NNN--Standards of Performance for VOC Emissions From SOCMI Distillation Operations, effective June 29, 1990) is exempt from the requirements of §115.121(a)(2)(A) of this title.

(E) Any reactor process vent gas stream which meets the requirements of 40 CFR 60.700(c)(2) or 60.702(c) (concerning Subpart RRR--Standards of Performance for VOC Emissions From SOCMI Reactor Processes, effective November 27, 1995) is exempt from the requirements of §115.121(a)(2)(A) of this title.

(5) Bakeries are exempt from the requirements of §115.121(a)(3) and §115.122(a)(3) of this title (relating to Emission Specifications and Control Requirements) if the total weight of VOC emitted from all bakery ovens on the property, when uncontrolled, is less than 25 tons per calendar year.

(6) A vent gas stream is exempt from this division (relating to Vent Gas Control) if all of the VOCs in the vent gas stream originate from a source(s) for which another division within Chapter 115 (for example, Storage of VOC) has established a control requirement(s), emission specification(s), or exemption(s) which applies to that VOC source category in that county.

(7) A combustion unit exhaust stream is exempt from this division (relating to Vent Gas Control) provided that the unit is not being used as a control device for any vent gas stream which is subject to this division and which originates from a non-combustion source.

(8) As an alternative to complying with the requirements of this division (relating to Vent Gas Control) (or, in the case of bakeries, as an alternative to complying with the requirements of §115.121(a)(1) and §115.122(a)(1) of this title) for a source that is addressed by a Chapter 115

contingency rule (i.e., one in which Chapter 115 requirements are triggered for that source by the commission publishing notification in the *Texas Register* that implementation of the contingency rule is necessary), the owner or operator of that source may instead choose to comply with the requirements of the contingency rule as though the contingency rule already had been implemented for that source. The owner or operator of each source choosing this option shall submit written notification to the executive director and any local air pollution control program with jurisdiction. When the executive director and the local program (if any) receive such notification, the source will then be considered subject to the contingency rule as though the contingency rule already had been implemented for that source.

(b) For all persons in Nueces and Victoria Counties, the following exemptions apply.

(1) A vent gas stream from a low-density polyethylene plant is exempt from the requirements of §115.121(b)(1) of this title if no more than 1.1 pounds of ethylene per 1,000 pounds (1.1 kg/1,000 kg) of product are emitted from all the vent gas streams associated with the formation, handling, and storage of the solidified product.

(2) The following vent gas streams are exempt from the requirements of §115.121(b) of this title:

(A) a vent gas stream having a combined weight of the VOC or classes of compounds specified in §115.121(b)(2) and (3) of this title equal to or less than 100 pounds (45.4 kg) in any continuous 24-hour period; and

(B) a vent gas stream with a concentration of the VOC or classes of compounds specified in §115.121(b)(2) and (3) of this title less than 30,000 ppmv.

(3) A vent gas stream is exempt from this division (relating to Vent Gas Control) if all of the VOCs in the vent gas stream originate from a source(s) for which another division within Chapter 115 (for example, Storage of VOC) has established a control requirement(s), emission specification(s), or exemption(s) which applies to that VOC source category in that county.

(4) A combustion unit exhaust stream is exempt from this division (relating to Vent Gas Control) provided that the unit is not being used as a control device for any vent gas stream which is subject to this division and which originates from a non-combustion source.

(c) For all persons in Aransas, Bexar, Calhoun, Matagorda, San Patricio, and Travis Counties, the following exemptions apply.

(1) The following vent gas streams are exempt from the requirements of §115.121(c)(1) of this title:

(A) a vent gas stream from a low-density polyethylene plant provided that no more than 1.1 pounds of ethylene per 1,000 pounds (1.1 kg/1,000 kg) of product are emitted from all the vent gas streams associated with the formation, handling, and storage of solidified product;

(B) a vent gas stream having a combined weight of the VOC or classes of compounds specified in §115.121(c)(1)(B)-(C) of this title equal to or less than 100 pounds (45.4 kg) in any continuous 24-hour period; and

(C) a vent gas stream having a concentration of the VOC specified in §115.121(c)(1)(B) and (C) of this title less than 30,000 ppmv.

(2) A vent gas stream specified in §115.121(c)(2) of this title which emits less than or equal to five tons (4,536 kg) of total uncontrolled VOC in any one calendar year is exempt from the requirements of §115.121(c)(2) of this title.

(3) A vent gas stream is exempt from this division (relating to Vent Gas Control) if all of the VOCs in the vent gas stream originate from a source(s) for which another division within Chapter 115 (for example, Storage of VOC) has established a control requirement(s), emission specification(s), or exemption(s) which applies to that VOC source category in that county.

(4) A combustion unit exhaust stream is exempt from this division (relating to Vent Gas Control) provided that the unit is not being used as a control device for any vent gas stream which is subject to this division and which originates from a non-combustion source.

§115.129. Counties and Compliance Schedules.

(a) The owner or operator of each vent gas stream in Aransas, Bexar, Brazoria, Calhoun, Chambers, Collin, Dallas, Denton, El Paso, Fort Bend, Galveston, Hardin, Harris, Jefferson, Liberty, Matagorda, Montgomery, Nueces, Orange, San Patricio, Tarrant, Travis, Victoria, and Waller Counties shall continue to comply with this division (relating to Vent Gas Control) as required by §115.930 of this title (relating to Compliance Dates).

(b) The owner or operator of each bakery in Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties shall comply with §§115.121(a)(3), 115.122(a)(3), and 115.126(5) of this title (relating to Emission Specifications; Control Requirements; and Monitoring and Recordkeeping Requirements) as soon as practicable, but no later than December 31, 2001.

(c) The owner or operator of each bakery in Collin, Dallas, Denton, and Tarrant Counties subject to §115.122(a)(3)(B) of this title shall comply with §§115.121(a)(3), 115.122(a)(3), and 115.126(5) of this title as soon as practicable, but no later than December 31, 2000.

(d) The owner or operator of each bakery in Collin, Dallas, Denton, and Tarrant Counties subject to §115.122(a)(3)(C) of this title shall comply with §§115.121(a)(3), 115.122(a)(3)(C), and 115.126(6) of this title as soon as practicable, but no later than one year, after the commission publishes notification in the *Texas Register* of its determination that this contingency rule is necessary as a result

of failure to attain the national ambient air quality standard (NAAQS) for ozone by the attainment deadline or failure to demonstrate reasonable further progress as set forth in the FCAA, §172(c)(9).

(e) The owner or operator of each bakery in El Paso County subject to §115.122(a)(3)(D) of this title shall comply with §§115.121(a)(3), 115.122(a)(3)(D), and 115.126(6) of this title as soon as practicable, but no later than one year, after the commission publishes notification in the *Texas Register* of its determination that this contingency rule is necessary as a result of failure to attain the NAAQS for ozone by the attainment deadline or failure to demonstrate reasonable further progress as set forth in the FCAA, §172(c)(9).

(f) The owner or operator of each flare in Brazoria, Chambers, Collin, Dallas, Denton, Fort Bend, Galveston, Hardin, Harris, Jefferson, Liberty, Montgomery, Orange, Tarrant, and Waller Counties which is used to comply with the requirements of §115.121 and/or §115.122 of this title shall comply with §115.125(3)(C) and §115.126(1)(B) of this title (relating to Testing Requirements; and Monitoring and Recordkeeping Requirements) as soon as practicable, but no later than December 31, 2001.

(g) The owner or operator of each vent gas stream in Aransas, Bexar, Calhoun, Matagorda, San Patricio, and Travis Counties shall comply with the recordkeeping requirements of §115.126(3) and (4) of this title as soon as practicable, but no later than December 31, 2001.

SUBCHAPTER B: GENERAL VOLATILE ORGANIC COMPOUND SOURCES

DIVISION 6: BATCH PROCESSES

§§115.161, 115.162, 115.164 - 115.167, 115.169

STATUTORY AUTHORITY

The amendments are adopted under the Texas Health and Safety Code, Texas Clean Air Act, (TCAA), §382.011, concerning General Powers and Duties, which provides the commission with the authority to establish the level of quality to be maintained in the state's air and the authority to control the quality of the state's air; §382.017, concerning Rules, which provides the commission with the authority to adopt rules consistent with the policy and purposes of the TCAA; and §382.012, concerning State Air Control Plan, which requires the commission to develop plans for protection of the state's air, such as the SIP.

§115.161. Applicability.

(a) The provisions of §§115.162 - 115.167 of this title (relating to Control Requirements; Alternate Control Requirements; Determination of Emissions and Flow Rates; Approved Test Methods and Testing Requirements; Monitoring and Recordkeeping Requirements; and Exemptions) apply to vent gas streams at batch process operations in the Beaumont/Port Arthur and Houston/Galveston areas, as defined in §115.10 of this title (relating to Definitions), under the following Standard Industrial Classification (SIC) codes:

(1) 2821 (plastic resins and materials);

(2) 2833 (medicinals and botanicals);

(3) 2834 (pharmaceutical preparations);

(4) 2861 (gum and wood chemicals);

(5) 2865 (cyclic crudes and intermediates);

(6) 2869 (industrial organic chemicals, not elsewhere classified); and

(7) 2879 (agricultural chemicals, not elsewhere classified).

(b) Any batch process operation that is exempt under §115.167(1) of this title (relating to Exemptions) is subject to the requirements of Division 2 of this subchapter (relating to Vent Gas Control).

§115.162. Control Requirements.

The owner or operator of each batch process operation in the Beaumont/Port Arthur and Houston/Galveston areas shall comply with the following control requirements.

(1) Reasonable available control technology (RACT) equations. The volatile organic compounds (VOC) mass emission rate from individual process vents or for process vent streams in aggregate within a batch process shall be reduced by 90% if the actual average flow rate value (in standard cubic feet per minute (scfm)) is below the flow rate (FR) value calculated using the applicable RACT equation for the volatility range (low, moderate, or high) of the material being emitted when the annual mass emission total (AE, in pounds per year) are input. The RACT equations, specific to volatility, are as follows:

(A) Low volatility: FR = 0.07(AE) - 1821;

(B) Moderate volatility: FR = 0.031(AE) - 494;

(C) High volatility: FR = 0.013(AE) - 301.

(2) Successive ranking scheme. For aggregate streams within a process, the control requirements must be evaluated with the following successive ranking scheme until control of a segment of unit operations is required or until all unit operations have been eliminated from the process pool.

(A) If, for the process vent streams in aggregate, the value of FR calculated using the applicable RACT equation in paragraph (1) of this section is negative (i.e., less than zero), then the process is exempt from the 90% control requirements, and the successive ranking scheme of

subparagraph (F) of this paragraph does not apply. This would occur if the mass annual emission rates are below the lower limits specified in §115.167(2)(A) of this title (relating to Exemptions).

(B) If, for the process vent streams in aggregate, the actual average flow rate value (in scfm) is below the value of FR calculated using the applicable RACT equation in paragraph (1) of this section, then the overall emissions from the batch process must be reduced by 90%, and the successive ranking scheme of subparagraph (F) of this paragraph does not apply. The owner or operator has the option of selecting which unit operations are to be controlled and to what levels, provided that the overall control meets the specified level of 90%. Single units that qualify for exemption under §115.167(2)(B) of this title do not have to be controlled even if all units should qualify for this exemption.

(C) If, for the process vent streams in aggregate, the actual average flow rate value (in scfm) is greater than the value of FR calculated using the applicable RACT equation in paragraph (1) of this section (and the calculated value of FR is a positive number), then the control requirements must be evaluated with the successive ranking scheme of subparagraph (F) of this paragraph until control of a segment of unit operations is required or until all unit operations have been eliminated from the process pool. Single units that qualify for exemption under §115.167(2)(B) of this title do not have to be included in the rankings and do not have to be controlled.

(D) Sources that are required to be controlled to the level specified by RACT (i.e., 90%) will have an average flow rate that is below the flow rate specified by the applicable RACT

equation in paragraph (1) of this section (when the source's annual emission total is input). The applicability criterion is implemented on a two-tier basis. First, single pieces of batch equipment corresponding to distinct unit operations shall be evaluated over the course of an entire year, regardless of what materials are handled or what products are manufactured in them. Second, equipment shall be evaluated as an aggregate if it can be linked together based on the definition of a process.

(E) To determine applicability of a RACT option in the aggregation scenario, all the VOC emissions from a single process shall be summed to obtain the annual mass emission total, and the weighted average flow rate from each process vent in the aggregation shall be used as the average flow rate.

(F) All unit operations in the batch process, as defined for the purpose of determining RACT applicability, shall be ranked in ascending order according to their ratio of annual emissions (pounds per year) divided by average flow rate (in scfm). Sources with the smallest ratios shall be listed first. This list of sources constitutes the "pool" of sources within a batch process. The annual emission total and average flow rate of the pool of sources shall then be compared against the RACT equations in paragraph (1) of this section to determine whether control of the pool is required.

(i) If control is not required after the initial ranking, unit operations having the lowest annual emissions/average flow rate ratio shall then be eliminated one by one, and the characteristics of annual emission and average flow rate for the remaining pool of equipment must be evaluated with each successive elimination of a source from the pool.

(ii) Control of the unit operations remaining in the pool to the specified level (i.e., 90%) shall be required once the aggregated characteristics of annual emissions and average flow rate have met the specified cutoffs. The owner or operator has the option of selecting which unit operations are to be controlled and to what levels, provided that the overall control meets the specified level of 90%.

(3) Once-in, always-in. Any batch process operation that becomes subject to the provisions of this division by exceeding provisions of §115.167 of this title will remain subject to the provision of this division, even if throughput or emissions later fall below exemption limits, unless and until emissions are reduced to no more than the controlled emissions level existing before implementation of the project by which throughput or emission rate was reduced to less than the applicable exemption limits in §115.167 of this title; and

(A) the project by which throughput or emission rate was reduced is authorized by any permit or permit amendment or standard permit or permit by rule required by Chapter 116 or Chapter 106 of this title (relating to Control of Air Pollution by Permits for New Construction or Modification; and Permits by Rule). If a permit by rule is available for the project, compliance with this division must be maintained for 30 days after the filing of documentation of compliance with that permit by rule; or

(B) if authorization by permit, permit amendment, standard permit, or permit by rule is not required for the project, the owner/operator has given the executive director 30 days' notice of the project in writing.

§115.164. Determination of Emissions and Flow Rates.

The owner or operator of each batch process operation in the Beaumont/Port Arthur and Houston/Galveston areas shall determine the mass emissions and flow rates as follows.

(1) Determination of Uncontrolled Annual Emission Total. The owner or operator shall determine the annual mass emissions total by using engineering estimates of the uncontrolled emissions from a process vent or group of process vents within a batch process train and multiplying by the potential or permitted number of batch cycles per year. Engineering estimates must follow the guidance contained in EPA's *Control of Volatile Organic Compound Emissions from Batch Processes - Alternative Control Techniques Information Document* (EPA-453/R-94-020, February 1994). Alternatively, if an emissions measurement is used to measure vent emissions, the measurement must conform with the requirements of measuring incoming mass flow rate of volatile organic compounds as specified in §115.165 of this title (relating to Approved Test Methods and Testing Requirements).

(2) Determination of Average Flow Rate. To obtain a value for average flow rate, the owner or operator may choose to measure the flow rates or to estimate the flow rates using the estimation methods contained in EPA's *Control of Volatile Organic Compound Emissions from Batch*

Processes - Alternative Control Techniques Information Document (EPA-453/R-94-020, February 1994). For existing manifolds, the average flow rate may be the flow rate that was assumed in the design.

§115.165. Approved Test Methods and Testing Requirements.

The owner or operator of each batch process operation in the Beaumont/Port Arthur and Houston/Galveston areas shall comply with the following.

(1) Performance testing conditions. For the purpose of determining compliance with the control requirements of this division (relating to Batch Processes), the process unit shall be run at a scenario that represents maximum batch rates (e.g., three batches per day, 1,000 lbs per batch, etc.) during any performance test.

(2) Test methods. The owner or operator of each batch process operation shall use the following methods to determine compliance with the percent reduction efficiency requirement of §115.162 of this title (relating to Control Requirements).

(A) Flow rate.

(i) Test Methods 1 or 1A (40 Code of Federal Regulations (CFR) 60, Appendix A) as appropriate, shall be used for selection of the sampling sites if the flow rate measuring

device is a rotameter. No traverse is necessary when the flow measuring device is an ultrasonic probe. The control device inlet sampling sites for determination of vent stream volatile organic compounds (VOC) composition reduction efficiency shall be before the control device and after the control device.

(ii) Test Methods 2, 2A, 2C, or 2D (40 CFR 60, Appendix A) as appropriate, shall be used for determination of gas stream volumetric flow rate. Flow rate measurements shall be made continuously.

(B) Concentration of VOC. Test Method 18 (40 CFR 60, Appendix A) (gas chromatography) or Test Method 25A (40 CFR 60, Appendix A) (flame ionization) shall be used to determine the concentration of VOC in the control device inlet and outlet.

(i) The sampling time for each run shall be the entire length of the batch cycle, during which readings shall be taken:

(I) continuously if Method 25A is used; or

(II) as often as is possible using Method 18, with a maximum of one-minute intervals between measurements throughout the batch cycle.

(ii) The emission rate of the process vent or inlet to the control device shall be determined by combining continuous concentration and flow rate measurements at simultaneous points throughout the batch cycle.

(iii) The mass flow rate of the control device outlet shall be determined by combining continuous concentration and flow rate measurements at simultaneous points throughout the batch cycle.

(iv) The efficiency of the control device shall be determined by integrating the mass flow rates obtained in clauses (ii) and (iii) of this subparagraph over the time of the batch cycle, and dividing the difference in inlet and outlet mass flow totals by the inlet mass flow total.

(C) Performance requirements for flares and vapor combustors.

(i) For flares, the performance test requirements of 40 CFR 60.18(b) shall apply.

(ii) For vapor combustors, the owner or operator may consider the unit to be a flare and meet the performance test requirements of 40 CFR 60.18(b).

(iii) Compliance with the requirements of 40 CFR 60.18(b) will be considered to represent 98% control of the VOC in the flare inlet.

(D) Minor modifications. Minor modifications to these test methods may be used, if approved by the executive director.

(E) Alternate test methods. Test methods other than those specified in subparagraphs (B) and (C) of this paragraph may be used if validated by 40 CFR 63, Appendix A, Test Method 301 (effective December 29, 1992). For the purposes of this paragraph, substitute "executive director" each place that Test Method 301 references "administrator."

§115.166. Monitoring and Recordkeeping Requirements.

The owner or operator of each batch process operation in the Beaumont/Port Arthur and Houston/Galveston areas shall maintain the following information for at least two years at the plant, as defined by its air quality account number. The owner or operator shall make the information available upon request to representatives of the executive director, EPA, or any local air pollution control agency having jurisdiction in the area:

(1) Vapor control systems. For vapor control systems used to control emissions from batch process operations, records of appropriate parameters to demonstrate compliance, including:

(A) continuous monitoring and recording of:

(i) for a direct-flame incinerator, the exhaust gas temperature in the firebox or in the ductwork immediately downstream of the firebox before any substantial heat exchange. The temperature monitoring device shall have an accuracy of ±0.5 degrees Celsius, or alternatively, ±1.0%;

(ii) for a catalytic incinerator, the exhaust gas temperature immediately before and after the catalyst bed. The temperature monitoring device shall have an accuracy of ±0.5 degrees Celsius, or alternatively, ±1.0%;

(iii) for an absorber, either:

(I) the scrubbing liquid temperature. The temperature monitoring device shall have an accuracy of ±1.0% of the temperature being monitored in degrees Celsius, or alternatively, ±0.02 specific gravity unit; or

(II) the concentration level of volatile organic compounds (VOC) exiting the recovery device based on a detection principle such as infrared, photoionization, or thermal conductivity;

(iv) for a condenser or refrigeration system, either:

(I) the condenser exit temperature. The temperature monitoring device shall have an accuracy of ±1.0% of the temperature being monitored in degrees Celsius, or alternatively, ±0.5 degrees Celsius; or

(II) the concentration level of VOC exiting the recovery device based on a detection principle such as infrared, photoionization, or thermal conductivity;

(v) for a carbon adsorption system, as defined in §101.1 of this title (relating to Definitions), either:

(I) steam flow (using an integrating steam flow monitoring device) and the carbon bed temperature. The steam flow monitor shall have an accuracy of ±10%. The temperature monitor shall have an accuracy of ±1.0% of the temperature being monitored in degrees Celsius, or ±0.5 degrees Celsius, whichever is greater; or

(II) the concentration level of VOC exiting the recovery device based on a detection principle such as infrared, photoionization, or thermal conductivity;

(vi) for a pressure swing adsorption unit that is the final recovery device, the temperature of the bed near the inlet and near the outlet. The temperature monitoring device shall have an accuracy of ±1.0% of the temperature being monitored in degrees Celsius, or ±0.5 degrees Celsius; and

(vii) for a vapor combustor, the exhaust gas temperature in the firebox or in the ductwork immediately downstream of the firebox before any substantial heat exchange. The temperature monitoring device shall have an accuracy of ±0.5 degrees Celsius, or alternatively, ±1.0%. Alternatively, the owner or operator of a vapor combustor may consider the unit to be a flare and meet the requirements of subparagraph (B) of this paragraph.

(B) for flares, the requirements specified in 40 Code of Federal Regulations 60.18(b) and Chapter 111 of this title (relating to Control of Air Pollution from Visible Emissions and Particulate Matter); and

(C) for vapor control systems other than those specified in subparagraphs (A) and (B) of this paragraph, records of appropriate operating parameters.

(2) Process vents. A record of the following emission stream parameters for each process vent contained in the batch process:

(A) the annual mass emission total and documentation verifying these values. If emission estimate equations are used, the documentation shall be the calculations coupled with the expected or permitted (if available) number of emission events per year; and

(B) the average flow rate in standard cubic feet per minute and documentation verifying these values.

(3) Performance test monitoring parameters. Records of the following parameters required to be measured during a performance test required under §115.165 of this title (relating to Approved Test Methods and Testing Requirements) and required to be monitored under paragraph (1) of this section:

(A) where an owner or operator seeks to demonstrate compliance with §115.162 of this title (relating to Control Requirements) through use of either a direct-flame or catalytic incinerator, the average firebox temperature of the incinerator (or the average temperature upstream and downstream of the catalyst bed for a catalytic incinerator), measured continuously and averaged over the same time period as the performance test;

(B) where an owner or operator seeks to demonstrate compliance with §115.162 of this title through use of a smokeless flare, the flare design (i.e., steam-assisted, air-assisted, or nonassisted), all visible emissions readings, heat content determinations, flow rate measurements, and exit velocity determinations made during the performance test; continuous flare pilot flame monitoring; and all periods of operations during which the pilot flame is absent; and

(C) where an owner or operator seeks to demonstrate compliance with §115.162 of this title:

(i) with an absorber as the final control device, the exit specific gravity (or alternative parameter which is a measure of the degree of absorbing liquid saturation, if approved by

the executive director) and average exit temperature of the absorbing liquid measured continuously and averaged over the same time period as the performance test (both measured while the vent stream is routed normally);

(ii) with a condenser as the control device, the average exit (product side) temperature measured continuously and averaged over the same time period as the performance test while the vent stream is routed normally;

(iii) with a carbon adsorption system as the control device, the total steam mass flow measured continuously and averaged over the same time period as the performance test (full carbon bed cycle), temperature of the carbon bed after regeneration (and within 15 minutes of completion of any cooling cycle(s)), and duration of the carbon bed steaming cycle (all measured while the vent stream is routed normally);

(iv) the concentration level or reading indicated by an organic monitoring device at the outlet of the absorber, condenser, or carbon adsorption system, measured continuously and averaged over the same time period as the performance test while the vent stream is routed normally; and

(v) with a pressure swing adsorption unit as the final recovery device, the temperature of the bed near the inlet and near the outlet. The temperature monitoring device shall

have an accuracy of ±1.0% of the temperature being monitored in degrees Celsius, or ±0.5 degrees Celsius.

§115.167. Exemptions.

The following exemptions apply.

(1) Batch process operations at an account which has total volatile organic compound (VOC) emissions (determined before control but after the last recovery device) of less than the following rates from all stationary emission sources included in the account are exempt from the requirements of this division (relating to Batch Processes), except for §115.161(b) of this title (relating to Applicability):

(A) 100 tons per year (tpy) in the Beaumont/Port Arthur area; and

(B) 25 tpy in the Houston/Galveston area.

(2) The following are exempt from the requirements of this division, except for §115.164 and §115.166(2) and (3) of this title (relating to Determination of Emissions and Flow Rates; and Monitoring and Recordkeeping Requirements):

(A) Combined vents from a batch process train which have an annual mass emissions total as follows:

Figure: 30 TAC §115.167(2)(A) (No change.)

Volatility Range	Lower Limit of Annual Mass Emissions Total in pounds per year (lb/yr)
Low	26,014
Moderate	15,935
High	23,154

(B) Single unit operations that have an annual mass emissions total of 500 lb/yr or less.

§115.169. Counties and Compliance Schedules.

(a) The owner or operator of each batch process operation in Hardin, Jefferson, and Orange Counties shall be in compliance with this division (relating to Batch Processes) as soon as practicable, but no later than December 31, 2001. All batch process operations subject to this division in Hardin, Jefferson, and Orange Counties shall continue to comply with the requirements of Division 2 of this

subchapter (relating to Vent Gas Control) until these batch process operations are in compliance with the requirements of this division.

(b) The owner or operator of each batch process operation in Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties shall be in compliance with this division (relating to Batch Processes) as soon as practicable, but no later than December 31, 2002. All batch process operations subject to this division in Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties shall continue to comply with the requirements of Division 2 of this subchapter (relating to Vent Gas Control) until these batch process operations are in compliance with the requirements of this division.

SUBCHAPTER C: VOLATILE ORGANIC COMPOUND TRANSFER OPERATIONS

DIVISION 1: LOADING AND UNLOADING OF VOLATILE ORGANIC COMPOUNDS

§§115.211, 115.212, 115.216

STATUTORY AUTHORITY

The amendments are adopted under the Texas Health and Safety Code, Texas Clean Air Act (TCAA), §382.011, concerning General Powers and Duties, which provides the commission with the authority to establish the level of quality to be maintained in the state's air and the authority to control the quality of the state's air; §382.017, concerning Rules, which provides the commission with the authority to adopt rules consistent with the policy and purposes of the TCAA; and §382.012, concerning State Air Control Plan, which requires the commission to develop plans for protection of the state's air, such as the SIP.

§115.211. Emission Specifications.

The owner or operator of each gasoline terminal in the covered attainment counties and in the Beaumont/Port Arthur, Dallas/Fort Worth, El Paso, and Houston/Galveston areas, as defined in §115.10 of this title (relating to Definitions), shall ensure that volatile organic compound (VOC) emissions from the vapor control system vent at gasoline terminals do not exceed the following rates:

(1) in the Beaumont/Port Arthur, Dallas/Fort Worth, El Paso, and Houston/Galveston areas, 0.09 pound per 1,000 gallons (10.8 mg/liter) of gasoline loaded into transport vessels.

(2) in the covered attainment counties, 0.17 pound per 1,000 gallons (20 mg/liter) of gasoline loaded into transport vessels. Until April 30, 2000 in Gregg, Nueces, and Victoria Counties, VOC emissions are limited to 0.67 pound per 1,000 gallons (80 mg/liter) of gasoline loaded into transport vessels.

§115.212. Control Requirements.

(a) The owner or operator of each volatile organic compound (VOC) transfer operation, transport vessel, and marine vessel in the Beaumont/Port Arthur, Dallas/Fort Worth, El Paso, and Houston/Galveston areas shall comply with the following control requirements.

(1) General VOC loading. At VOC loading operations other than gasoline terminals, gasoline bulk plants, and marine terminals, vapors from the transport vessel caused by the loading of VOC with a true vapor pressure greater than or equal to 0.5 psia under actual storage conditions must be controlled by:

(A) a vapor control system which maintains a control efficiency of at least 90%; or

(B) a vapor balance system, as defined in §115.10 of this title (relating to Definitions); or

(C) pressurized loading.

(2) Disposal of transported vapors. After unloading, transport vessels must be kept vapor-tight until the vapors in the transport vessel are returned to a loading, cleaning, or degassing operation and discharged in accordance with the control requirements of that operation.

(3) Leak-free requirements. All land-based VOC transfer to or from transport vessels shall be conducted such that:

(A) All liquid and vapor lines are:

(i) equipped with fittings which make vapor-tight connections that close automatically when disconnected; or

(ii) equipped to permit residual VOC after transfer is complete to discharge into a recovery or disposal system which routes all VOC emissions to a vapor control system or a vapor balance system. After VOC transfer, if necessary to empty a liquid line, the contents may be placed in a portable container, which is then closed vapor-tight and disposed of properly.

(B) There are no VOC leaks, as defined in §101.1 of this title (relating to Definitions), when measured with a hydrocarbon gas analyzer, and no liquid or vapor leaks, as detected by sight, sound, or smell, from any potential leak source in the transport vessel and transfer system

(including, but not limited to, liquid lines, vapor lines, hatch covers, pumps, and valves, including pressure relief valves).

(C) All gauging and sampling devices are vapor-tight except for necessary gauging and sampling. Any nonvapor-tight gauging and/or sampling shall:

(i) be limited in duration to the time necessary to practicably gauge and/or sample; and

(ii) not occur while VOC is being transferred.

(D) Any openings in a transport vessel during unloading are limited to minimum openings which are sufficient to prevent collapse of the transport vessel.

(E) If VOC is loaded through the hatches of a transport vessel, then pneumatic, hydraulic, or other mechanical means shall force a vapor-tight seal between the loading arm's vapor collection adapter and the hatch. A means shall be provided which prevents liquid drainage from the loading device when it is removed from the hatch of any transport vessel, or which routes all VOC emissions to a vapor control system. After VOC transfer, if necessary to empty a liquid line, the contents may be placed in a portable container, which is then closed vapor-tight and disposed of properly.

(4) Gasoline terminals. The following additional control requirements apply to the transfer of gasoline at gasoline terminals.

(A) A vapor control system must be used to control the vapors from loading each transport vessel.

(B) Vapor control systems and loading equipment at gasoline terminals shall be designed and operated such that gauge pressure does not exceed 18 inches of water and vacuum does not exceed six inches of water in the gasoline tank-truck.

(C) Each gasoline terminal shall be equipped with sensors and other equipment designed and connected to monitor the status of the control device. If the control device malfunctions or is not operational, the system shall automatically stop gasoline transfer to the transport vessel(s) immediately.

(D) As an alternative to subparagraph (C) of this paragraph, the following requirements apply to gasoline terminals which have a variable vapor space holding tank design that can process the vapors independent of transport vessel loading. Such gasoline terminals shall be equipped with sensors and other equipment designed and connected to monitor the status of the control device. If the variable vapor space holding tank serving the loading rack(s) does not have the capacity to store additional vapors for processing by the control device at a later time and the control device

malfunctions or is not operational, the system shall automatically stop gasoline transfer to the transport vessel(s) immediately.

(5) Gasoline bulk plants. The following additional control requirements apply to transfer of gasoline at gasoline bulk plants.

(A) A vapor balance system must be used between the storage tank and transport vessel. Alternatively, a vapor control system which maintains a control efficiency of at least 90% may be used to control the vapors.

(B) While filling a transport vessel from a storage tank:

(i) the transport vessel, if equipped for top loading, must use a submerged fill pipe; and

(ii) gauge pressure must not exceed 18 inches of water and vacuum must not exceed six inches of water in the gasoline tank-truck tank.

(6) Marine terminals. The following control requirements apply to marine terminals in the Houston/Galveston area.

(A) VOC emissions shall not exceed 0.09 pound from the vapor control system vent per 1,000 gallons (10.8 mg/liter) of VOC loaded into the marine vessel, or the vapor control system shall maintain a control efficiency of at least 90%. Alternatively, a vapor balance system or pressurized loading may be used to control the vapors.

(B) Only leak-free marine vessels, as defined in §115.10 of this title, shall be used for loading operations.

(C) All gauging and sampling devices shall be vapor-tight except for necessary gauging and sampling. Any nonvapor-tight gauging and/or sampling shall:

(i) be limited in duration to the time necessary to practicably gauge and/or sample; and

(ii) not occur while VOC is being transferred.

(D) When non-dedicated loading lines are used to load VOC with a true vapor pressure less than 0.5 psia (or a flash point of 150 degrees Fahrenheit or greater) and the preceding transfer through these lines was VOC with a true vapor pressure equal to or greater than 0.5 psia, the residual VOC vapors from this preceding transfer must be controlled by the vapor control system, vapor balance system, or pressurized loading as specified in subparagraph (A) of this paragraph.

(7) Once-in-always-in. Any loading or unloading operation that becomes subject to the provisions of this subsection by exceeding provisions of §115.217(a) of this title (relating to Exemptions) will remain subject to the provision of this subsection, even if throughput or emissions later fall below exemption limits unless and until emissions are reduced to no more than the controlled emissions level existing before implementation of the project by which throughput or emission rate was reduced to less than the applicable exemption limits in §115.217(a) of this title; and

(A) the project by which throughput or emission rate was reduced is authorized by any permit or permit amendment or standard permit or permit by rule required by Chapter 116 or Chapter 106 of this title (relating to Control of Air Pollution by Permits for New Construction or Modification; and Permits by Rule). If a permit by rule is available for the project, compliance with this subsection must be maintained for 30 days after the filing of documentation of compliance with that permit by rule; or

(B) if authorization by permit, permit amendment, standard permit, or permit by rule is not required for the project, the owner/operator has given the executive director 30 days' notice of the project in writing.

(b) The owner or operator of each land-based VOC transfer operation and transport vessel in the covered attainment counties shall comply with the following control requirements.

(1) General VOC loading in Aransas, Bexar, Calhoun, Gregg, Matagorda, Nueces, San Patricio, Travis, and Victoria Counties. At VOC loading operations other than gasoline terminals and gasoline bulk plants, vapors from the transport vessel caused by the loading of VOC with a true vapor pressure greater than or equal to 1.5 psia under actual storage conditions must be controlled by:

(A) a vapor control system which maintains a control efficiency of at least 90%;

(B) a vapor balance system, as defined in §115.10 of this title; or

(C) pressurized loading.

(2) Disposal of transported vapors. After unloading, transport vessels must be kept vapor-tight until the vapors in the transport vessel are returned to a loading, cleaning, or degassing operation and discharged in accordance with the control requirements of that operation.

(3) Leak-free requirements. All land-based VOC transfer to or from transport vessels shall be conducted such that:

(A) all liquid and vapor lines are:

(i) equipped with fittings which make vapor-tight connections and that close automatically when disconnected; or

(ii) equipped to permit residual VOC after transfer is complete to discharge into a recovery or disposal system which routes all VOC emissions to a vapor control system or a vapor balance system. After VOC transfer, if necessary to empty a liquid line, the contents may be placed in a portable container, which is then closed vapor-tight and disposed of properly.

(B) there are no VOC leaks, as defined in §101.1 of this title, when measured with a hydrocarbon gas analyzer, and no liquid or vapor leaks, as detected by sight, sound, or smell, from any potential leak source in the transport vessel and transfer system (including, but not limited to, liquid lines, vapor lines, hatch covers, pumps, and valves, including pressure relief valves);

(C) all gauging and sampling devices are vapor-tight except for necessary gauging and sampling. Any nonvapor-tight gauging and/or sampling shall:

(i) be limited in duration to the time necessary to practicably gauge and/or sample; and

(ii) not occur while VOC is being transferred;

(D) any openings in a transport vessel during unloading are limited to minimum openings which are sufficient to prevent collapse of the transport vessel;

(E) if VOC is loaded through the hatches of a transport vessel, then pneumatic, hydraulic, or other mechanical means shall force a vapor-tight seal between the loading arm's vapor collection adapter and the hatch. A means shall be provided which prevents liquid drainage from the loading device when it is removed from the hatch of any transport vessel, or which routes all VOC emissions to a vapor control system. After VOC transfer, if necessary to empty a liquid line, the contents may be placed in a portable container, which is then closed vapor-tight and disposed of properly.

(4) Gasoline terminals. The following additional control requirements apply to gasoline transfer at gasoline terminals.

(A) A vapor control system must be used to control the vapors from loading the transport vessel.

(B) Vapor control systems and loading equipment at gasoline terminals shall be designed and operated such that gauge pressure does not exceed 18 inches of water and vacuum does not exceed six inches of water in the gasoline tank-truck.

(C) Each gasoline terminal shall be equipped with sensors and other equipment designed and connected to monitor the status of the control device. If the control device malfunctions or is not operational, the system shall automatically stop gasoline transfer to the transport vessel(s) immediately.

(D) As an alternative to subparagraph (C) of this paragraph, the following requirements apply to gasoline terminals which have a variable vapor space holding tank design that can process the vapors independent of transport vessel loading. Such gasoline terminals shall be equipped with sensors and other equipment designed and connected to monitor the status of the control device. If the variable vapor space holding tank serving the loading rack(s) does not have the capacity to store additional vapors for processing by the control device at a later time and the control device malfunctions or is not operational, the system shall automatically stop gasoline transfer to the transport vessel(s) immediately.

(5) Gasoline bulk plants. The following additional control requirements apply to gasoline transfer at gasoline bulk plants.

(A) A vapor balance system must be used between the storage tank and transport vessel. Alternatively, a vapor control system which maintains a control efficiency of at least 90% may be used to control the vapors.

(B) While filling a transport vessel from a storage tank:

(i) the transport vessel, if equipped for top loading, must use a submerged fill pipe; and

(ii) gauge pressure must not exceed 18 inches of water and vacuum must not exceed six inches of water in the gasoline tank-truck tank.

§115.216. Monitoring and Recordkeeping Requirements.

The owner or operator of each volatile organic compound (VOC) loading or unloading operation in the covered attainment counties or in the Beaumont/Port Arthur, Dallas/Fort Worth, El Paso, and Houston/Galveston areas shall maintain the following information for at least two years at the plant, as defined by its air quality account number. The owner or operator shall make the information available upon request to representatives of the executive director, EPA, or any local air pollution control agency having jurisdiction in the area.

(1) Vapor control systems. For vapor control systems used to control emissions from VOC transfer operations, records of appropriate parameters to demonstrate compliance, including:

(A) continuous monitoring and recording of:

(i) the exhaust gas temperature immediately downstream of a direct-flame incinerator;

(ii) the inlet and outlet gas temperature of a chiller or catalytic incinerator;

(iii) the exhaust gas VOC concentration of a carbon adsorption system, as defined in §101.1 of this title (relating to Definitions); and

(iv) the exhaust gas temperature immediately downstream of a vapor combustor. Alternatively, the owner or operator of a vapor combustor may consider the unit to be a flare and meet the requirements of subparagraph (B) of this paragraph;

(B) the requirements specified in 40 Code of Federal Regulations 60.18(b) and Chapter 111 of this title (relating to Control of Air Pollution from Visible Emissions and Particulate Matter) for flares; and

(C) for vapor control systems other than those specified in subparagraphs (A) and (B) of this paragraph, records of appropriate operating parameters.

(2) Test results. A record of the results of any testing conducted in accordance with §115.215 of this title (relating to Approved Test Methods).

(3) Land-based VOC transfer to or from transport vessels.

(A) A daily record of:

(i) the identification number of each tank-truck tank for which annual leak testing is required under §115.214(a)(1)(C) or (b)(1)(C) of this title (relating to Inspection Requirements);

(ii) the quantity of VOC loaded into each transport vessel; and

(iii) the date of the last leak testing of each tank-truck tank as required by §115.214(a)(1)(C) or (b)(1)(C) of this title.

(B) A record of the type and vapor pressure of each VOC transferred (excluding gasoline).

(C) The owner or operator of any plant, as defined by its air quality account number, at which all VOC transferred has a true vapor pressure at actual storage conditions less than 0.5 psia as specified in §115.217(a)(1) of this title (relating to Exemptions) or 1.5 psia as specified in §115.217(b)(1) of this title, is not required to keep the records specified in subparagraph (A) of this paragraph.

(D) The owner or operator of any plant, as defined by its air quality account number, that is exempt under §115.217(a)(2)(A) or (B), or §115.217(b)(3)(A) or (B) of this title based

upon gallons per day transferred shall maintain a daily record of the total throughput of gasoline or of VOC equal to or greater than 0.5 or 1.5 psia vapor pressure, as appropriate, loaded into transport vessels at the plant.

(E) For gasoline terminals, records of the results of the fugitive monitoring and maintenance program required by §115.214(a)(2) and (b)(2) of this title:

(i) a description of the types, identification numbers, and locations of all equipment in gasoline service;

(ii) the date of each monthly inspection;

(iii) the results of each inspection;

(iv) the location, nature, severity, and method of detection for each leak;

(v) the date each leak is repaired and explanation if repair is delayed beyond 15 days;

(vi) a list identifying those leaking components which cannot be repaired or replaced until a scheduled unit shutdown; and

(vii) the inspector’s name and signature.

(4) Marine terminals. For marine terminals in the Houston/Galveston area:

(A) a daily record of all marine vessels loaded at the affected terminal, including:

(i) the name, registry of the marine vessel, and the legal owner or operator of the marine vessel;

(ii) the chemical name and amount of VOC cargo loaded; and

(iii) the conditions of the tanks prior to being loaded (i.e., cleaned, crude oil washed, gas freed, etc.) and the prior cargo carried by the marine vessel;

(B) a copy of each marine vessel's vapor tightness test documentation or records documenting compliance with the alternate methods specified in §115.214(a)(3)(A) of this title;

(C) a copy of each marine vessel's first attempt repair log required by §115.214(a)(3)(D) of this title;

(D) records of the results of the fugitive monitoring and maintenance program required by §115.214(a)(3)(F) of this title, including appropriate dates, test methods, instrument readings, repair results, and corrective action taken. Records of flange inspections are not required unless a leak is detected.

SUBCHAPTER C: VOLATILE ORGANIC COMPOUND TRANSFER OPERATIONS

DIVISION 4: CONTROL OF VEHICLE REFUELING EMISSIONS (STAGE II)

AT MOTOR VEHICLE FUEL DISPENSING FACILITIES

§115.240

STATUTORY AUTHORITY

The new section is adopted under the Texas Health and Safety Code, Texas Clean Air Act (TCAA), §382.011, concerning General Powers and Duties, which provides the commission with the authority to establish the level of quality to be maintained in the state's air and the authority to control the quality of the state's air; §382.017, concerning Rules, which provides the commission with the authority to adopt rules consistent with the policy and purposes of the TCAA; and §382.012, concerning State Air Control Plan, which requires the commission to develop plans for protection of the state's air, such as the SIP.

§115.240. Stage II Vapor Recovery Definitions.

The following words and terms, when used in this division, shall have the following meanings, unless the context clearly indicates otherwise. Additional definitions for terms used in this division are found in §115.10 of this title (relating to Definitions), §101.1 of this title (relating to Definitions), and §3.2 of this title (relating to Definitions).

(1) **Independent small business marketer of gasoline** - A person engaged in the marketing of gasoline who owns the dispensing equipment at a motor vehicle fuel dispensing facility

and receives at least 50% of his annual income from the marketing of gasoline. A person is not an independent small business marketer of gasoline if such person:

(A) is a refiner; or

(B) controls (i.e., owns more than 50% of a business or corporation's stock), is controlled by, or is under common control with, a refiner; or

(C) is otherwise directly or indirectly affiliated with a refiner or with a person who controls, is controlled by, or is under common control with a refiner (unless the sole affiliation is by means of a supply contract or an agreement or contract to use a trademark, trade name, service mark, or other identifying symbol or name owned by such refiner or any such person).

(2) **Owner or operator of a motor vehicle fuel dispensing facility** - Any person who owns, leases, operates, or controls the motor vehicle fuel dispensing facility.

SUBCHAPTER E: SOLVENT-USING PROCESSES

DIVISION 3: FLEXOGRAPHIC AND ROTOGRAVURE PRINTING

§115.430

STATUTORY AUTHORITY

The new section is adopted under the Texas Health and Safety Code, Texas Clean Air Act (TCAA), §382.011, concerning General Powers and Duties, which provides the commission with the authority to establish the level of quality to be maintained in the state's air and the authority to control the quality of the state's air; §382.017, concerning Rules, which provides the commission with the authority to adopt rules consistent with the policy and purposes of the TCAA; and §382.012, concerning State Air Control Plan, which requires the commission to develop plans for protection of the state's air.

§115.430. Flexographic and Rotogravure Printing Definitions.

The following words and terms, when used in this division, shall have the following meanings, unless the context clearly indicates otherwise. Additional definitions for terms used in this division are found in §115.10 of this title (relating to Definitions), §101.1 of this title (relating to Definitions), and §3.2 of this title (relating to Definitions).

(1) **Flexographic printing process** - A method of printing in which the image areas are raised above the non-image areas, and the image carrier is made of an elastomeric material.

(2) **Packaging rotogravure printing** - Any rotogravure printing upon paper, paper board, metal foil, plastic film, or any other substrate which is, in subsequent operations, formed into packaging products or labels.

(3) **Publication rotogravure printing** - Any rotogravure printing upon paper which is subsequently formed into books, magazines, catalogues, brochures, directories, newspaper supplements, or other types of printed materials.

(4) **Rotogravure printing** - The application of words, designs, and/or pictures to any substrate by means of a roll printing technique which involves a recessed image area. The recessed area is loaded with ink and pressed directly to the substrate for image transfer.

SUBCHAPTER E: SOLVENT-USING PROCESSES

DIVISION 4: OFFSET LITHOGRAPHIC PRINTING

§115.449

STATUTORY AUTHORITY

The amendment is adopted under the Texas Health and Safety Code, Texas Clean Air Act (TCAA), §382.011, concerning General Powers and Duties, which provides the commission with the authority to establish the level of quality to be maintained in the state's air and the authority to control the quality of the state's air; §382.017, concerning Rules, which provides the commission with the authority to adopt rules consistent with the policy and purposes of the TCAA; and §382.012, concerning State Air Control Plan, which requires the commission to develop plans for protection of the state's air, such as the SIP.

§115.449. Counties and Compliance Schedules.

(a) In El Paso County, all offset lithographic printing presses shall be in compliance with §§115.442, 115.443, 115.445, and 115.446 of this title (relating to Control Requirements; Alternate Control Requirements; Testing Requirements; and Monitoring and Recordkeeping Requirements) as soon as practicable, but no later than November 15, 1996.

(b) In Collin, Dallas, Denton, and Tarrant Counties, all offset lithographic printing presses on a property which, when uncontrolled, emit a combined weight of volatile organic compound (VOC)

equal to or greater than 50 tons per calendar year, shall be in compliance with §§115.442, 115.443, 115.445, and 115.446 of this title as soon as practicable, but no later than December 31, 2000.

(c) In Collin, Dallas, Denton, and Tarrant Counties, all offset lithographic printing presses on a property which, when uncontrolled, emit a combined weight of VOC less than 50 tons per calendar year, shall be in compliance with §§115.442, 115.443, 115.445, and 115.446 of this title as soon as practicable, but no later than one year, after the commission publishes notification in the *Texas Register* of its determination that this contingency rule is necessary as a result of failure to attain the national ambient air quality standard (NAAQS) for ozone by the attainment deadline or failure to demonstrate reasonable further progress as set forth in the 1990 Amendments to the Federal Clean Air Act (FCAA), §172(c)(9).

(d) In Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties, all offset lithographic printing presses on a property which, when uncontrolled, emit a combined weight of VOC equal to or greater than 25 tons per calendar year, shall be in compliance with §§115.442, 115.443, 115.445, and 115.446 of this title as soon as practicable, but no later than December 31, 2002.

(e) In Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties, all offset lithographic printing presses on a property which, when uncontrolled, emit a combined weight of VOC less than 25 tons per calendar year, shall be in compliance with §§115.442, 115.443, 115.445, and 115.446 of this title as soon as practicable, but no later than one year, after the

commission publishes notification in the *Texas Register* of its determination that this contingency rule is necessary as a result of failure to attain the NAAQS for ozone by the attainment deadline or failure to demonstrate reasonable further progress as set forth in the FCAA, §172(c)(9).